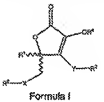
What is claimed is:

1. A method of treatment for a mammal suffering from a dermatologic condition comprising administering a therapeutically effective amount of a compound of Formula I,



Formula I

wherein:

R^1 is: -C(O)OR'; -C(O)NR'R"; $-CH_2OR'''$; cyano; optionally substituted heterocyclyl; optionally substituted heterocyclyl-alkyl; optionally substituted heteroaryl, or optionally substituted heteroaralkyl;

R^2 is: optionally substituted alkyl; optionally substituted cycloalkyl; optionally substituted aryl; optionally substituted aralkyl; optionally substituted heterocyclyl; optionally substituted heteroaryl; optionally substituted heteroaralkyl; an optionally substituted nucleoside; an optionally substituted amino acid; or an optionally substituted di-, tri- or tetra-peptide;

R^3 is: optionally substituted alkyl; optionally substituted cycloalkyl; optionally substituted aryl; optionally substituted aralkyl; optionally substituted heterocyclyl; optionally substituted heteroaryl; optionally substituted heteroaralkyl; an optionally substituted nucleoside; an optionally substituted amino acid; or an optionally substituted di-, tri- or tetra-peptide;

R^4 is: hydrogen; alkyl; alkylcarbonyl; (poly)alkoxyalkylene; or dialkoxyphosphoryloxy;

X is: lower alkylene; -N(R')-; -S-; -S(O)-; $-S(O)_2$-; or X taken together with R^3 is -P(O)(OR')-;

Y is: -N(R')-; -S-; -S(O)-; $-S(O)_2$-; or Y taken together with R^3 is $-P(O)(OR')_2$;

or X-R^2 taken together with Y-R^3 form an optionally substituted aliphatic or aromatic ring;

R' is: hydrogen; alkenyl; optionally substituted alkyl; optionally substituted cycloalkyl; phosphoryl; or optionally substituted aryl;

R" is: hydrogen; alkenyl; optionally substituted alkyl; or optionally substituted aryl;

or R' and R" together with the atom to which they are attached form a 5- to 7- membered aromatic, saturated or unsaturated ring, optionally incorporating one or more additional heteroatoms chosen from N, O, or S, and optionally substituted with one or more substituents selected from the group consisting of optionally substituted lower alkyl, halo, cyano, alkylthio, lower alkoxy, carboxy, benzyl, and oxo;

R'" is: hydrogen; alkenyl; optionally substituted alkyl; acyl, optionally substituted cycloalkyl; phosphoryl; or optionally substituted aryl;

Author Search

```
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FILE COVERS 1907 - 17 Sep 2009  VOL 151 ISS 12
FILE LAST UPDATED: 16 Sep 2009  (20090916/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Jun 2009

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FILE COVERS 1907 - 17 Sep 2009  VOL 151 ISS 12
FILE LAST UPDATED: 16 Sep 2009  (20090916/ED)
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REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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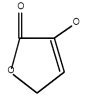
L1 STR



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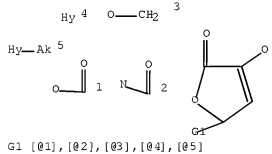
L8 STR



G1 [@1],[@2],[@3],[@4],[@5]

Structure attributes must be viewed using STN Express query preparation.
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L12 6489 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON ACNE/CT OR SKIN, DISEASE+OLD,NT/CT (L) ROSACEA/OBI
L13 20206 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON DERMATITIS+NT/CT
L14 6 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L11 AND (L12 OR L13)
L15 69130 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON UV RADIATION+OLD,NT/CT

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L16             5 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L11 AND L15
L17         10603 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  (UV LIGHT/OBI)
L18         32750 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  (ULTRAVIOLET/OBI OR
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L19             2 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L11 AND (L17 OR L18)
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L21            11 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  WALKINSHAW G?/AU
L22         19787 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  WANG B?/AU
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FILE LAST UPDATED:          15 SEP 2009   <20090915/UP>
MOST RECENT UPDATE:           200959      <200959/DW>
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>>> IPC, ECLA, US National Classifications and Japanese F-Terms
    and FI-Terms have been updated with reclassifications to
    mid-June 2009.
    No update date (UP) has been created for the reclassified
    documents, but they can be identified by
    specific update codes (see HELP CLA for details)<<<

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>>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<

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http://go.thomsonreuters.com/dwpi_code-revision

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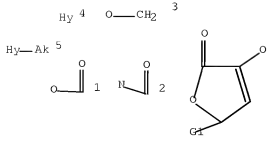

G1 [@1],[@2],[@3],[@4],[@5]

Structure attributes must be viewed using STN Express query preparation.

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=> DUP REM L24 L31
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PROCESSING COMPLETED FOR L24
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                ANSWER '2' FROM FILE WPIX

=> D IBIB ED ABS HITSTR 1; D IBIB AB HITSTR 2

L45  ANSWER 1 OF 2  HCAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2004:120569  HCAPLUS  Full-text
DOCUMENT NUMBER:          140:181315
TITLE:                    Preparation of furanones as cytoprotectants for
                          dermatologic conditions
INVENTOR(S):              Boddupalli, Sekhar; Walkinshaw, Gail
                          ; Wang, Bing
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 66 pp., Cont.-in-part of U.S.
                          Ser. No. 354,474.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040029812	A1	20040212	US 2003-630170	20030730
US 20030176361	A1	20030918	US 2003-354474	20030128
US 6667330	B2	20031223		
WO 2005016340	A1	20050224	WO 2004-US24491	20040728

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1660080	A1	20060531	EP 2004-786136	20040728

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PRIORITY APPLN. INFO.:	US 2002-353939P	P 20020131
	US 2003-354474	A2 20030128
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OTHER SOURCE(S): MARPAT 140:181315

ED Entered STN: 13 Feb 2004

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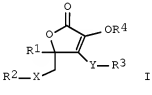

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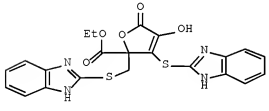

II

AB Title compds. I [R1 = CO2R', CONR'R'', CH2OR''', CN, (un)substituted heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl; R2, R3 = independently (un)substituted alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, nucleoside, amino acid, di-, tri- or tetra-peptide; R4 = H, alkyl, alkylcarbonyl, (poly)alkoxyalkylene, dialkoxyphosphoryloxy; X = alkylene, NR', S, SO, SO2; or XR2 = PO(OR')2; Y = NR', S, SO, SO2; or YR3 = PO(OR')2; or XR2YR3 = (un)substituted aliphatic or aromatic ring; R' = H, alkenyl, (un)substituted alkyl, cycloalkyl, phosphoryl, aryl; R'' = H, alkenyl, (un)substituted alkyl, aryl; or R'R'' = atoms that form

(un)substituted 5-7 membered aryl, heteroaryl ring; R''' = H, alkenyl, (un)substituted alkyl, acyl, cycloalkyl, phosphoryl, aryl; and their single tautomers, single stereoisomers, mixts. of tautomers and/or stereoisomers, and pharmaceutically acceptable salts] were prepared as cytoprotectants for treating dermatol. conditions. For example, II was prepared by reaction of 2-mercaptobenzimidazole with Et bromopyruvate in ethanol/acetone and aldol condensation of the two tautomeric forms of the pyruvate intermediate. Selected invention compds. showed significant reduction in edema in assays assessing mouse ear inflammatory response to topical arachidonic acid (10% to 70%, $p < 0.05$). Results from various assays were disclosed for selected invention compds. Thus, I and their pharmaceutical formulations are useful for regulating skin condition, regulating the signs of skin aging or for treating contact dermatitis, skin irritation, acne, rosacea, psoriasis, age-related damage or damage resulting from harmful (UV) radiation or environmental pollution, stress or fatigue.

IT 577952-58-0P 577952-60-4P 577952-61-5P
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(cytoprotective agent; preparation of furanone cytoprotectants via aldol condensation for treatment of dermatol. conditions)

RN 577952-58-0 HCAPLUS

CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

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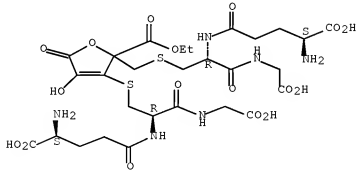
CRN 577952-57-9
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.



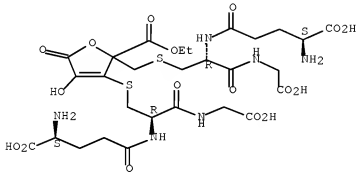
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 577952-60-4 HCAPLUS

CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

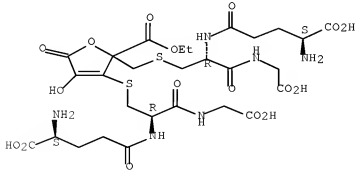


●2 HCl

RN 577952-61-5 HCAPLUS

CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●2 HBr

IT 577952-47-7P 577952-51-3P 577952-69-3P
577952-70-6P 577952-71-7P 577952-97-7P
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cytoprotective agent; preparation of furanone cytoprotectants via aldol condensation for treatment of dermatol. conditions)

RN 577952-47-7 HCAPLUS

CN Glycine, L-γ-glutamyl-S-[(2S)-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

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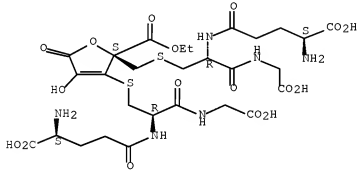
CRN 577952-46-6
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.



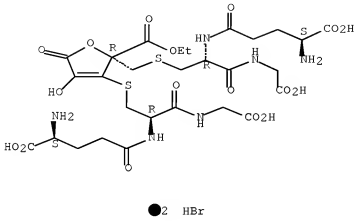
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 577952-51-3 HCAPLUS

CN Glycine, L-γ-glutamyl-S-[(2R)-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●2 HBr

RN 577952-69-3 HCAPLUS

CN Glycine, L-γ-glutamyl-S-[(2R)-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

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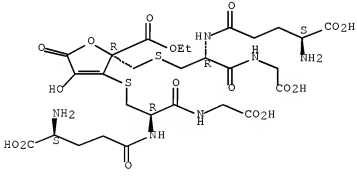
CRN 577952-68-2
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.



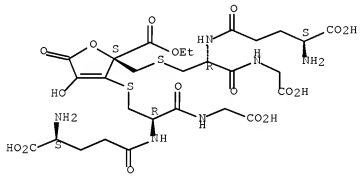
CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 577952-70-6 HCAPLUS

CN Glycine, L-γ-glutamyl-S-[(2S)-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

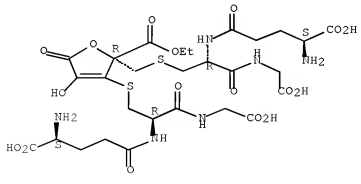


●2 HBr

RN 577952-71-7 HCAPLUS

CN Glycine, L-γ-glutamyl-S-[(2R)-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dihydrochloride (9CI) (CA INDEX NAME)

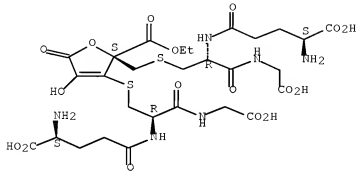
Absolute stereochemistry.



●2 HCl

RN 577952-97-7 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[(2S)-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dihydrochloride (9CI) (CA INDEX NAME)

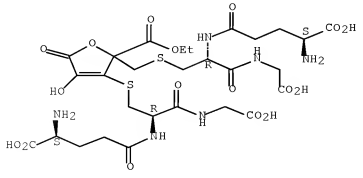
Absolute stereochemistry.



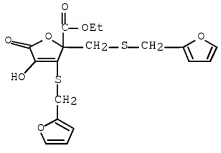
●2 HCl

IT 577952-57-9P 577952-80-8P, 4-Hydroxy-5-oxo-3-(2-furanylmethylsulfanyl)-2-[(2-furanylmethylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-84-2P, 4-(1H-Benzimidazol-2-ylsulfanyl)-5-[(1H-benzimidazol-2-ylsulfanyl)methyl]-3-hydroxy-5-hydroxymethyl-5H-furan-2-one RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(cytoprotective agent; preparation of furanone cytoprotectants via aldol condensation for treatment of dermatol. conditions)
RN 577952-57-9 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine (9CI) (CA INDEX NAME)

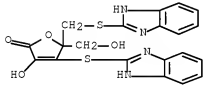
Absolute stereochemistry.



RN 577952-80-8 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(2-furanylmethyl)thio]-2-[[(2-furanylmethyl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577952-84-2 HCAPLUS
CN 2(5H)-Furanone, 4-(1H-benzimidazol-2-ylthio)-5-[(1H-benzimidazol-2-ylthio)methyl]-3-hydroxy-5-(hydroxymethyl)- (CA INDEX NAME)



IT 577952-48-8P, 3-(3-Amino-[1,2,4]thiadiazol-5-ylsulfanyl)-2-(((3-amino-[1,2,4]thiadiazol-5-yl)sulfanyl)methyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-49-9P, 3-(3-Amino-[1,2,4]thiadiazol-5-ylsulfanyl)-2-(((3-amino-[1,2,4]thiadiazol-5-yl)sulfanyl)methyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester, trimethylamine salt 577952-50-2P, 3-((5-Amino-2H-[1,2,4]triazol-3-yl)sulfanyl)-2-(((5-amino-2H-[1,2,4]triazol-3-yl)sulfanyl)methyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-52-4P, 4-Hydroxy-5-oxo-3-(5-phenyl-[1,3,4]oxadiazol-2-ylsulfanyl)-2-(5-phenyl-[1,3,4]oxadiazol-2-ylsulfanylmethyl)-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-53-5P, 3-(5-Chlorobenzothiazol-2-ylsulfanyl)-2-[(5-chloro-benzothiazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-54-6P, 4-Hydroxy-3-(5-methoxy-1H-benzimidazol-2-ylsulfanyl)-2-[(5-methoxy-1H-benzimidazol-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-55-7P, 4-Hydroxy-5-oxo-3-(p-tolylsulfanyl)-2-(p-tolylsulfanylmethyl)-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-56-8P 577952-62-6P 577952-63-7P 577952-64-8P

577952-65-9P 577952-66-0P 577952-67-1P
577952-72-8P 577952-73-9P,
4-Hydroxy-5-oxo-3-(pyridin-4-ylsulfanyl)-2-[(pyridin-4-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-74-0P,
5,8-Dichloro-3-hydroxy-2-oxo-2H-1-oxa-4,9-dithiabenzo[f]azulene-10a-carboxylic acid ethyl ester 577952-75-1P,
3-(1H-Benzimidazol-2-ylsulfanyl)-2-[(1H-benzimidazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid 577952-76-2P
, 3-(Benzothiazol-2-ylsulfanyl)-2-[(benzothiazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid (2-hydroxyethyl)amide
577952-78-4P, 3-(Benzothiazol-2-ylsulfanyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid 577952-79-5P,
4-(Furan-2-ylmethylsulfanyl)-5-[(furan-2-ylmethylsulfanyl)methyl]-3-hydroxy-5-hydroxymethyl-5H-furan-2-one 577952-81-9P,
4-(2,2-Dimethylpropionyloxy)-3-(furan-2-ylmethylsulfanyl)-2-[(furan-2-ylmethylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-82-0P 577952-83-1P
577952-85-3P, 4-(1H-Benzimidazol-2-ylsulfanyl)-5-[(1H-benzimidazol-2-ylsulfanyl)methyl]-3-hydroxy-5-(thiazol-2-yl)-5H-furan-2-one
577952-86-4P, 3-(Benzothiazol-2-ylsulfanyl)-2-[(benzothiazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid
577952-87-5P, 3-(2-Chloro-4-fluorophenylsulfanyl)-2-[(2-chloro-4-fluorophenylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-88-6P 577952-89-7P,
4-(Benzoxazol-2-ylsulfanyl)-5-[(benzoxazol-2-ylsulfanyl)methyl]-3-hydroxy-5-hydroxymethyl-5H-furan-2-one 577952-90-0P,
4-(5-Chlorobenzothiazol-2-ylsulfanyl)-5-[(5-chlorobenzothiazol-2-ylsulfanyl)methyl]-3-hydroxy-5-hydroxymethyl-5H-furan-2-one
577952-91-1P, 4-(Benzothiazol-2-ylsulfanyl)-5-[(benzothiazol-2-ylsulfanyl)methyl]-3-hydroxy-5-hydroxymethyl-5H-furan-2-one
577952-92-2P, 3-(2-Chloro-6-fluorobenzylsulfanyl)-2-[(2-chloro-6-fluorobenzylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-93-3P,
3-(5,6-Dichloro-1H-benzimidazol-2-ylsulfanyl)-2-[(5,6-dichloro-1H-benzimidazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-94-4P,
4-Hydroxy-3-(5-methoxybenzothiazol-2-ylsulfanyl)-2-[(5-methoxybenzothiazol-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester
577952-95-5P, 3-(2,4-Dichlorobenzylsulfanyl)-2-[(2,4-dichlorobenzylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-96-6P,
2-[(Benzothiazol-2-ylsulfinyl)methyl]-3-(benzothiazol-2-ylsulfanyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester
577952-98-8P, 4-Hydroxy-3-(6-nitrobenzothiazol-2-ylsulfanyl)-2-[(6-nitrobenzothiazol-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-99-9P,
2-[(1H-Benzimidazol-2-ylsulfanyl)methyl]-4-ethoxy-3-(1-ethyl-1H-benzimidazol-2-ylsulfanyl)-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-00-5P, 3-[Furan-2-ylmethanesulfinyl]-2-((furan-2-ylmethanesulfinyl)methyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-01-6P,
2-[(Furan-2-ylmethanesulfinyl)methyl]-3-(furan-2-ylmethanesulfonyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester
577953-02-7P, 4-Hydroxy-3-methylsulfanyl-2-methylsulfanylmethyl-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-03-8P
, 3-(5-Amino-[1,3,4]thiadiazol-2-ylsulfanyl)-2-(((5-amino-[1,3,4]thiadiazol-2-yl)sulfanyl)methyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid 577953-04-9P,
3-(Benzoxazol-2-ylsulfanyl)-2-[(benzothiazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid methyl ester

577953-05-0P 577953-06-1P 577953-07-2P, 3-(Furan-2-ylmethylsulfanyl)-2-[(furan-2-ylmethylsulfanyl)methyl]-4-isobutanoyloxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-08-3P, 4-(2,2-Dimethylpropanoyloxy)-3-ethoxycarbonylmethylsulfanyl-2-[(ethoxycarbonylmethylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-09-4P, 4-Hydroxy-5-oxo-3-(4-phenylthiazol-2-ylsulfanyl)-2-[(4-phenylthiazol-2-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-10-7P, 3-(2-Dimethylaminoethylsulfanyl)-2-[(2-dimethylaminoethylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid 577953-11-8P, 4-Hydroxy-3-[(1-methyl-1H-imidazol-2-yl)sulfanyl]-2-[(1-methyl-1H-imidazol-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-12-9P, 3-Cyclopentylsulfanyl-2-cyclopentylsulfanylmethyl-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-13-0P, 3-Butylsulfanyl-2-butylsulfanylmethyl-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-14-1P, 4-Hydroxy-3-isobutylsulfanyl-2-isobutylsulfanylmethyl-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-15-2P, 4-Hydroxy-3-(naphthalen-2-ylsulfanyl)-2-[(naphthalen-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-16-3P, 4-Hydroxy-5-oxo-3-[(1-phenyl-1H-tetrazol-5-yl)sulfanyl]-2-[[(1-phenyl-1H-tetrazol-5-yl)sulfanyl]methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-17-4P, 4-Hydroxy-5-oxo-3-((5-phenyl-2H-[1,2,4]triazol-3-yl)sulfanyl)-2-(((5-phenyl-2H-[1,2,4]triazol-3-yl)sulfanyl)methyl)-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-18-5P, 4-Hydroxy-5-oxo-3-(thiazol-2-ylsulfanyl)-2-[(thiazol-2-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-19-6P, 3-Benzylsulfanyl-2-benzylsulfanylmethyl-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-20-9P, 4-Hydroxy-3-(4-methoxyphenylsulfanyl)-2-[(4-methoxyphenylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-21-0P, 3-(2-Chlorophenylsulfanyl)-2-[(2-chlorophenylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-22-1P, 3-(Benzothiazol-2-ylsulfanyl)-2-[(benzothiazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-23-2P, 3-(Benzoxazol-2-ylsulfanyl)-2-[(benzoxazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-24-3P, 4-Hydroxy-5-oxo-3-(4-trifluoromethylpyrimidin-2-ylsulfanyl)-2-[(4-trifluoromethylpyrimidin-2-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-25-4P, 4-Hydroxy-3-(4-methylpyrimidin-2-ylsulfanyl)-2-[(4-methylpyrimidin-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-26-5P, 4-Hydroxy-5-oxo-3-(pyrimidin-2-ylsulfanyl)-2-[(pyrimidin-2-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-27-6P, 4-Hydroxy-5-oxo-3-(2-sulfo-ethylsulfanyl)-2-[(2-sulfo-ethylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-28-7P, 4-Hydroxy-5-oxo-3-(7-trifluoromethylquinolin-4-ylsulfanyl)-2-[(7-trifluoromethylquinolin-4-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-29-8P 577953-30-1P 577953-31-2P, 3-Cyclohexylsulfanyl-2-cyclohexylsulfanylmethyl-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-33-4P, 3-(1H-Benzimidazol-2-ylsulfanyl)-4-hydroxy-5-oxo-5H-furan-2,2-dicarboxylic acid diethyl ester 577953-35-6P, 3-Benzylsulfanyl-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-36-7P, 4-Hydroxy-3-(5-methyl-1H-benzimidazol-2-

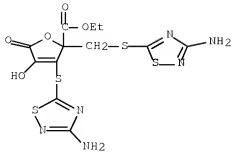
ylsulfanyl)-5-oxo-2,5-dihydrofuran-2-carboxylic acid 2-isopropyl-5-methylcyclohexyl ester 577953-38-9P, 3-(Benzoselenazol-2-ylsulfanyl)-2-[(benzoselenazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-39-0P, 4-Hydroxy-5-oxo-3-(4-phenylthiazol-2-ylsulfanyl)-2,5-dihydrofuran-2-carboxylic acid 577953-40-3P 577953-41-4P, 4-Hydroxy-5-oxo-3-(9H-purin-6-ylsulfanyl)-2-[(9H-purin-6-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-42-5P 577953-43-6P, 4-Hydroxy-3-(1H-imidazol-2-ylsulfanyl)-2-[(1H-imidazol-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-44-7P, 3-(2-Diethylaminoethylsulfanyl)-2-[(2-diethylaminoethylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-45-8P, 3-(1H-Benzimidazol-2-ylsulfanyl)-2-[(1H-benzimidazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid methyl ester 577953-46-9P, 3-(2-Dimethylaminoethylsulfanyl)-2-[(2-dimethylaminoethylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester hydrochloride 577953-47-0P, 4-Hydroxy-3-(2-methoxycarbonylethylsulfanyl)-2-[(2-methoxycarbonylethylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-48-1P, 4-Hydroxy-3-(methoxycarbonylmethylsulfanyl)-2-[(methoxycarbonylmethylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-49-2P, 3-(5-Amino-[1,3,4]thiadiazol-2-ylsulfanyl)-2-[((5-amino-[1,3,4]thiadiazol-2-yl)sulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-50-5P, 3-(1H-Benzimidazol-2-ylsulfanyl)-2-[(1H-benzimidazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-51-6P, 3-(4-Fluorobenzylsulfanyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2,2-dicarboxylic acid diethyl ester 577953-52-7P, 4-Hydroxy-5-oxo-3-(1-oxopyridin-2-ylsulfanyl)-2-[(1-oxopyridin-2-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-53-8P, 4-Hydroxy-3-(4-methoxybenzylsulfanyl)-2-[(4-methoxybenzylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-54-9P, 4-Hydroxy-3-(5-nitro-1H-benzimidazol-2-ylsulfanyl)-2-((5-nitro-1H-benzimidazol-2-ylsulfanyl)methyl)-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(cytoprotective agent; preparation of furanone cytoprotectants via aldol condensation for treatment of dermatol. conditions)

RN 577952-48-8 HCAPLUS

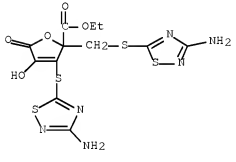
CN 2-Furancarboxylic acid, 3-[(3-amino-1,2,4-thiadiazol-5-yl)thio]-2-[[(3-amino-1,2,4-thiadiazol-5-yl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577952-49-9 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(3-amino-1,2,4-thiadiazol-5-yl)thio]-2-[[(3-amino-1,2,4-thiadiazol-5-yl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester, compd. with N,N-dimethylmethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

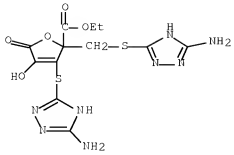
CRN 577952-48-8
CMF C12 H12 N6 O5 S4



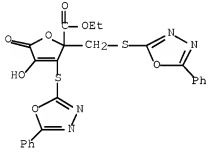
CM 2

CRN 75-50-3
CMF C3 H9 N

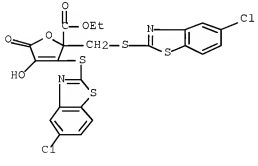
RN 577952-50-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(3-amino-1H-1,2,4-triazol-5-yl)thio]-2-[[(3-amino-1H-1,2,4-triazol-5-yl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577952-52-4 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(5-phenyl-1,3,4-oxadiazol-2-yl)thio]-2-[[(5-phenyl-1,3,4-oxadiazol-2-yl)thio]methyl]-, ethyl ester (CA INDEX NAME)

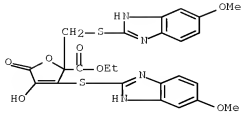


RN 577952-53-5 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(5-chloro-2-benzothiazolyl)thio]-2-[[(5-chloro-2-benzothiazolyl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)

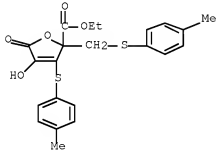


RN 577952-54-6 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(6-methoxy-1H-benzimidazol-2-yl)thio]-2-[[(6-methoxy-1H-benzimidazol-2-yl)thio]methyl]-5-

oxo-, ethyl ester (CA INDEX NAME)

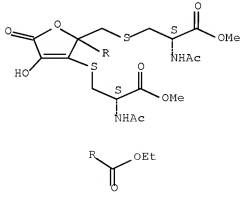


RN 577952-55-7 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(4-methylphenyl)thio]-2-[[(4-methylphenyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577952-56-8 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[(2S)-2-(acetylamino)-3-methoxy-3-oxopropyl]thio]-2-[[[(2S)-2-(acetylamino)-3-methoxy-3-oxopropyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

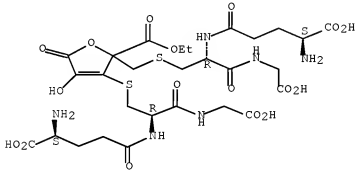


RN 577952-62-6 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dimethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 577952-57-9
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.



CM 2

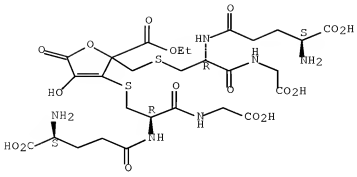
CRN 75-75-2
CMF C H4 O3 S

RN 577952-63-7 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, mono(4-methylbenzenesulfonate) (salt) (9CI) (CA INDEX NAME)

CM 1

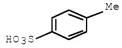
CRN 577952-57-9
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.



CM 2

CRN 104-15-4
CMF C7 H8 O3 S

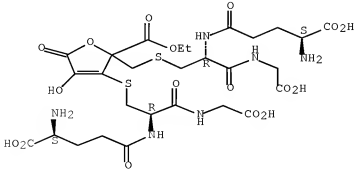


RN 577952-64-8 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, diacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 577952-57-9
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.



CM 2

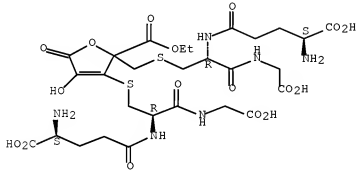
CRN 64-19-7
CMF C2 H4 O2

RN 577952-65-9 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, compd. with N,N-diethylethanamine (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 577952-57-9
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.



CM 2

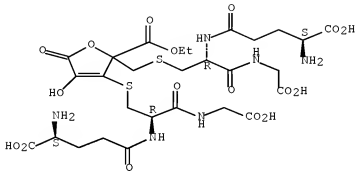
CRN 121-44-8
CMF C6 H15 N

RN 577952-66-0 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, compd. with N,N-diethylethanamine (1:4) (9CI) (CA INDEX NAME)

CM 1

CRN 577952-57-9
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.

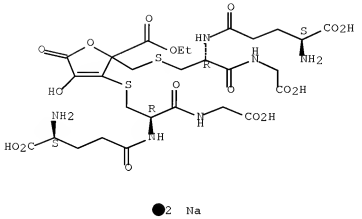


CM 2

CRN 121-44-8
CMF C6 H15 N

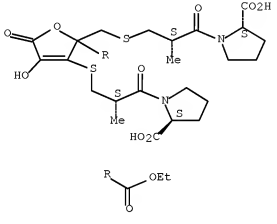
RN 577952-67-1 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, disodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

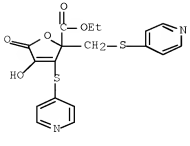


RN 577952-72-8 HCAPLUS
CN L-Proline, 1-[(2S)-3-[[[3-[[(2S)-3-[(2S)-2-carboxy-1-pyrrolidinyl]-2-methyl-3-oxopropyl]thio]-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-5-oxo-2-furanyl]methyl]thio]-2-methyl-1-oxopropyl]- (CA INDEX NAME)

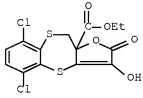
Absolute stereochemistry.



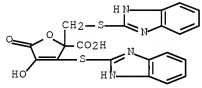
RN 577952-73-9 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-(4-pyridinylthio)-2-[(4-pyridinylthio)methyl]-, ethyl ester (CA INDEX NAME)



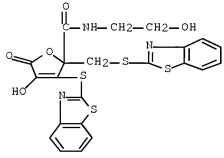
RN 577952-74-0 HCAPLUS
CN 2H-[1,5]Benzodithiepino[3,2-b]furan-10a(10H)-carboxylic acid, 5,8-dichloro-3-hydroxy-2-oxo-, ethyl ester (CA INDEX NAME)



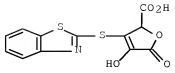
RN 577952-75-1 HCAPLUS
CN 2-Furancarboxylic acid, 3-(1H-benzimidazol-2-ylthio)-2-[(1H-benzimidazol-2-ylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo- (CA INDEX NAME)



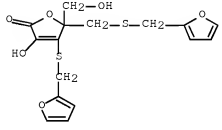
RN 577952-76-2 HCAPLUS
CN 2-Furancarboxamide, 3-(2-benzothiazolylthio)-2-[(2-benzothiazolylthio)methyl]-2,5-dihydro-4-hydroxy-N-(2-hydroxyethyl)-5-oxo- (CA INDEX NAME)



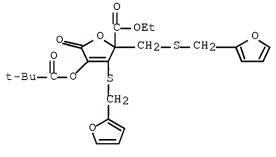
RN 577952-78-4 HCAPLUS
CN 2-Furancarboxylic acid, 3-(2-benzothiazolylthio)-2,5-dihydro-4-hydroxy-5-oxo- (CA INDEX NAME)



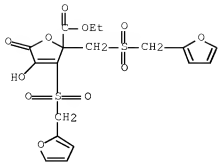
RN 577952-79-5 HCAPLUS
CN 2(5H)-Furanone, 4-[(2-furanylmethyl)thio]-5-[[(2-furanylmethyl)thio]methyl]-3-hydroxy-5-(hydroxymethyl)- (CA INDEX NAME)



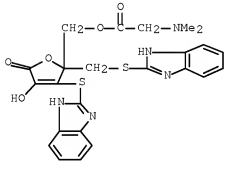
RN 577952-81-9 HCAPLUS
CN 2-Furancarboxylic acid, 4-(2,2-dimethyl-1-oxopropoxy)-3-[(2-furanylmethyl)thio]-2-[[(2-furanylmethyl)thio]methyl]-2,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



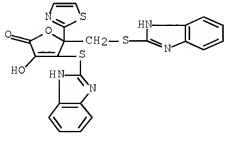
RN 577952-82-0 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(2-furanylmethyl)sulfonyl]-2-[[(2-furanylmethyl)sulfonyl]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



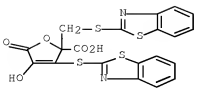
RN 577952-83-1 HCAPLUS
CN Glycine, N,N-dimethyl-, [3-(1H-benzimidazol-2-ylthio)-2-[(1H-benzimidazol-2-ylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-2-furanyl]methyl ester (CA INDEX NAME)



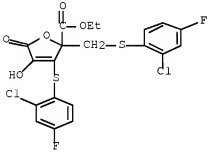
RN 577952-85-3 HCAPLUS
CN 2(5H)-Furanone, 4-(1H-benzimidazol-2-ylthio)-5-[(1H-benzimidazol-2-ylthio)methyl]-3-hydroxy-5-(2-thiazolyl)- (CA INDEX NAME)



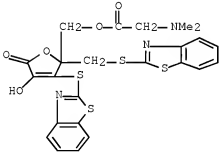
RN 577952-86-4 HCAPLUS
CN 2-Furancarboxylic acid, 3-(2-benzothiazolylthio)-2-[(2-benzothiazolylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo- (CA INDEX NAME)



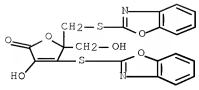
RN 577952-87-5 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(2-chloro-4-fluorophenyl)thio]-2-[[(2-chloro-4-fluorophenyl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



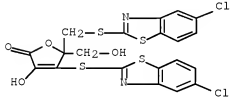
RN 577952-88-6 HCAPLUS
CN Glycine, N,N-dimethyl-, [3-(2-benzothiazolylthio)-2-[(2-benzothiazolylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-2-furanyl]methyl ester (CA INDEX NAME)



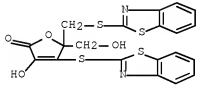
RN 577952-89-7 HCAPLUS
CN 2(5H)-Furanone, 4-(2-benzoxazolylthio)-5-[(2-benzoxazolylthio)methyl]-3-hydroxy-5-(hydroxymethyl)- (CA INDEX NAME)



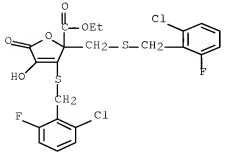
RN 577952-90-0 HCAPLUS
CN 2(5H)-Furanone, 4-[(5-chloro-2-benzothiazolyl)thio]-5-[[(5-chloro-2-benzothiazolyl)thio]methyl]-3-hydroxy-5-(hydroxymethyl)- (CA INDEX NAME)



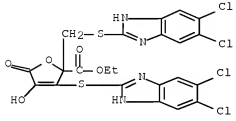
RN 577952-91-1 HCAPLUS
CN 2(5H)-Furanone, 4-(2-benzothiazolylthio)-5-[(2-benzothiazolylthio)methyl]-3-hydroxy-5-(hydroxymethyl)- (CA INDEX NAME)



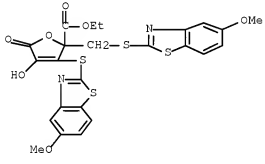
RN 577952-92-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[(2-chloro-6-fluorophenyl)methyl]thio]-2-[[[(2-chloro-6-fluorophenyl)methyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



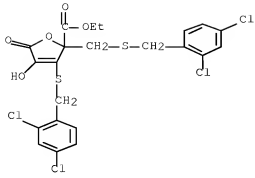
RN 577952-93-3 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(5,6-dichloro-1H-benzimidazol-2-yl)thio]-2-[[(5,6-dichloro-1H-benzimidazol-2-yl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



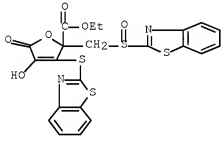
RN 577952-94-4 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(5-methoxy-2-benzothiazolyl)thio]-2-[[(5-methoxy-2-benzothiazolyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



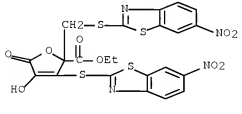
RN 577952-95-5 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[(2,4-dichlorophenyl)methyl]thio]-2-[[[(2,4-dichlorophenyl)methyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



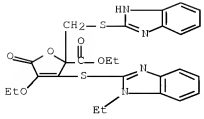
RN 577952-96-6 HCAPLUS
CN 2-Furancarboxylic acid, 2-[(2-benzothiazolylsulfinyl)methyl]-3-(2-benzothiazolylthio)-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



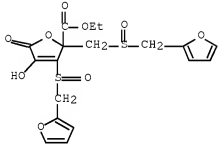
RN 577952-98-8 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(6-nitro-2-benzothiazolyl)thio]-2-[[(6-nitro-2-benzothiazolyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



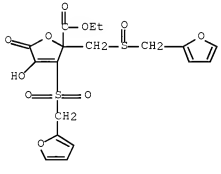
RN 577952-99-9 HCAPLUS
CN 2-Furancarboxylic acid, 2-[(1H-benzimidazol-2-ylthio)methyl]-4-ethoxy-3-[(1-ethyl-1H-benzimidazol-2-yl)thio]-2,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



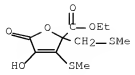
RN 577953-00-5 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(2-furanylmethyl)sulfinyl]-2-[[(2-furanylmethyl)sulfinyl]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



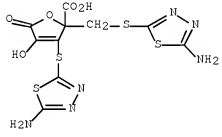
RN 577953-01-6 HCAPLUS
CN 2-Furancarboxylic acid, 2-[[(2-furanylmethyl)sulfinyl]methyl]-3-[(2-furanylmethyl)sulfonyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



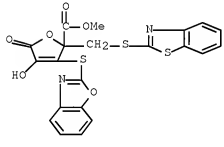
RN 577953-02-7 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-(methylthio)-2-[(methylthio)methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



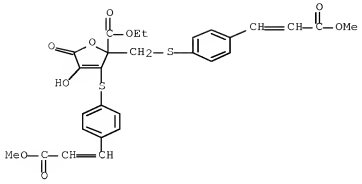
RN 577953-03-8 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(5-amino-1,3,4-thiadiazol-2-yl)thio]-2-[[(5-amino-1,3,4-thiadiazol-2-yl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo- (CA INDEX NAME)



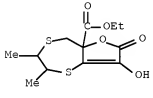
RN 577953-04-9 HCAPLUS
CN 2-Furancarboxylic acid, 2-[(2-benzothiazolylthio)methyl]-3-(2-benzoxazolylthio)-2,5-dihydro-4-hydroxy-5-oxo-, methyl ester (CA INDEX NAME)



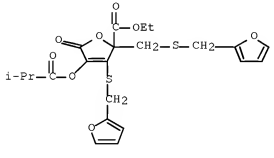
RN 577953-05-0 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[[4-(3-methoxy-3-oxo-1-propen-1-yl)phenyl]thio]-2-[[[4-(3-methoxy-3-oxo-1-propen-1-yl)phenyl]thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



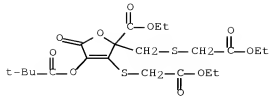
RN 577953-06-1 HCAPLUS
CN 5H-1,4-Dithiepino[6,5-b]furan-5a(7H)-carboxylic acid, 2,3-dihydro-8-hydroxy-2,3-dimethyl-7-oxo-, ethyl ester (CA INDEX NAME)



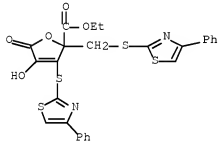
RN 577953-07-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(2-furanylmethyl)thio]-2-[[(2-furanylmethyl)thio]methyl]-2,5-dihydro-4-(2-methyl-1-oxopropoxy)-5-oxo-, ethyl ester (CA INDEX NAME)



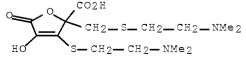
RN 577953-08-3 HCAPLUS
CN 2-Furancarboxylic acid, 4-(2,2-dimethyl-1-oxopropoxy)-3-[(2-ethoxy-2-oxoethyl)thio]-2-[[(2-ethoxy-2-oxoethyl)thio]methyl]-2,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



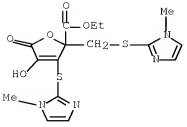
RN 577953-09-4 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(4-phenyl-2-thiazolyl)thio]-2-[[(4-phenyl-2-thiazolyl)thio]methyl]-, ethyl ester (CA INDEX NAME)



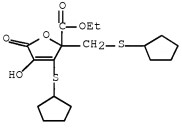
RN 577953-10-7 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[2-(dimethylamino)ethyl]thio]-2-[[[2-(dimethylamino)ethyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo- (CA INDEX NAME)



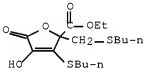
RN 577953-11-8 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(1-methyl-1H-imidazol-2-yl)thio]-2-[[(1-methyl-1H-imidazol-2-yl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



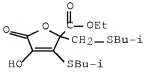
RN 577953-12-9 HCAPLUS
CN 2-Furancarboxylic acid, 3-(cyclopentylthio)-2-[(cyclopentylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577953-13-0 HCAPLUS
CN 2-Furancarboxylic acid, 3-(butylthio)-2-[(butylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)

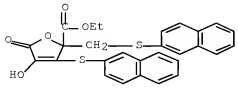


RN 577953-14-1 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(2-methylpropyl)thio]-2-[[(2-methylpropyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)

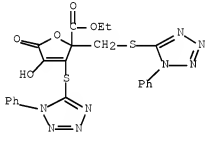


RN 577953-15-2 HCAPLUS

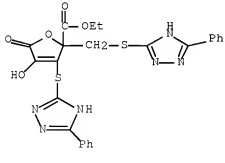
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-(2-naphthalenylthio)-2-[(2-naphthalenylthio)methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



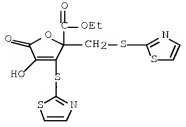
RN 577953-16-3 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(1-phenyl-1H-tetrazol-5-yl)thio]-2-[[(1-phenyl-1H-tetrazol-5-yl)thio]methyl]-, ethyl ester (CA INDEX NAME)



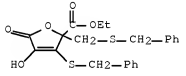
RN 577953-17-4 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(3-phenyl-1H-1,2,4-triazol-5-yl)thio]-2-[[(3-phenyl-1H-1,2,4-triazol-5-yl)thio]methyl]-, ethyl ester (CA INDEX NAME)



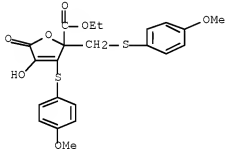
RN 577953-18-5 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-(2-thiazolylthio)-2-[(2-thiazolylthio)methyl]-, ethyl ester (CA INDEX NAME)



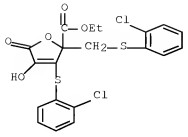
RN 577953-19-6 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(phenylmethyl)thio]-2-[[(phenylmethyl)thio]methyl]-, ethyl ester (CA INDEX NAME)



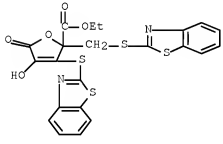
RN 577953-20-9 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(4-methoxyphenyl)thio]-2-[[(4-methoxyphenyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



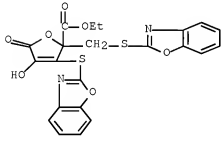
RN 577953-21-0 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(2-chlorophenyl)thio]-2-[[(2-chlorophenyl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



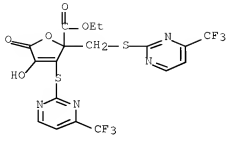
RN 577953-22-1 HCAPLUS
CN 2-Furancarboxylic acid, 3-(2-benzothiazolylthio)-2-[(2-benzothiazolylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



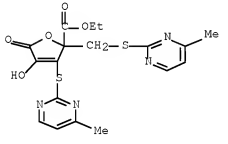
RN 577953-23-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-(2-benzoxazolylthio)-2-[(2-benzoxazolylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



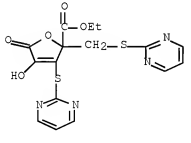
RN 577953-24-3 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[[4-(trifluoromethyl)-2-pyrimidinyl]thio]-2-[[[4-(trifluoromethyl)-2-pyrimidinyl]thio]methyl]-, ethyl ester (CA INDEX NAME)



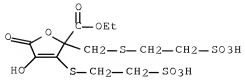
RN 577953-25-4 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(4-methyl-2-pyrimidinyl)thio]-2-[[(4-methyl-2-pyrimidinyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



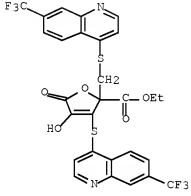
RN 577953-26-5 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-(2-pyrimidinylthio)-2-[(2-pyrimidinylthio)methyl]-, ethyl ester (CA INDEX NAME)



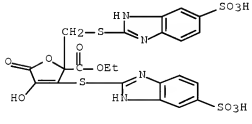
RN 577953-27-6 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(2-sulfoethyl)thio]-2-[[(2-sulfoethyl)thio]methyl]-, 2-ethyl ester (CA INDEX NAME)



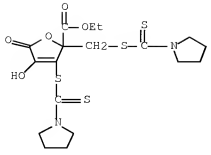
RN 577953-28-7 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[[7-(trifluoromethyl)-4-quinolinyl]thio]-2-[[[7-(trifluoromethyl)-4-quinolinyl]thio]methyl]-, ethyl ester (CA INDEX NAME)



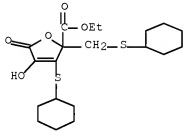
RN 577953-29-8 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(6-sulfo-1H-benzimidazol-2-yl)thio]-2-[[(6-sulfo-1H-benzimidazol-2-yl)thio]methyl]-, 2-ethyl ester (CA INDEX NAME)



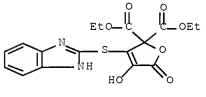
RN 577953-30-1 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(1-pyrrolidinylthioxomethyl)thio]-2-[[(1-pyrrolidinylthioxomethyl)thio]methyl]-, ethyl ester (CA INDEX NAME)



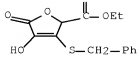
RN 577953-31-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-(cyclohexylthio)-2-[(cyclohexylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



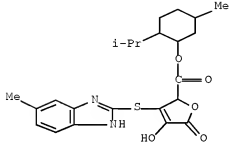
RN 577953-33-4 HCAPLUS
CN 2,2(5H)-Furandicarboxylic acid, 3-(1H-benzimidazol-2-ylthio)-4-hydroxy-5-oxo-, 2,2-diethyl ester (CA INDEX NAME)



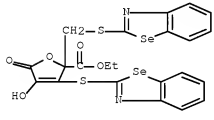
RN 577953-35-6 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(phenylmethyl)thio]-, ethyl ester (CA INDEX NAME)



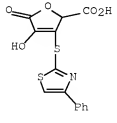
RN 577953-36-7 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(6-methyl-1H-benzimidazol-2-yl)thio]-5-oxo-, 5-methyl-2-(1-methylethyl)cyclohexyl ester (CA INDEX NAME)



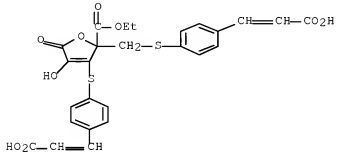
RN 577953-38-9 HCAPLUS
CN 2-Furancarboxylic acid, 3-(2-benzoselenazolylthio)-2-[(2-benzoselenazolylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (9CI) (CA INDEX NAME)



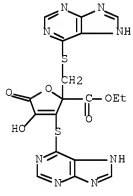
RN 577953-39-0 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(4-phenyl-2-thiazolyl)thio]- (CA INDEX NAME)



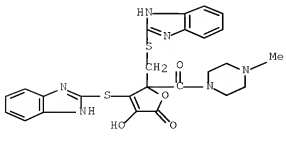
RN 577953-40-3 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[4-(2-carboxyethenyl)phenyl]thio]-2-[[[4-(2-carboxyethenyl)phenyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, 2-ethyl ester (CA INDEX NAME)



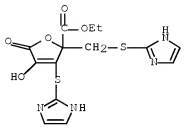
RN 577953-41-4 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-(9H-purin-6-ylthio)-2-[(9H-purin-6-ylthio)methyl]-, ethyl ester (CA INDEX NAME)



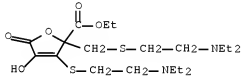
RN 577953-42-5 HCAPLUS
CN 2(5H)-Furanone, 4-(1H-benzimidazol-2-ylthio)-5-[(1H-benzimidazol-2-ylthio)methyl]-3-hydroxy-5-[(4-methyl-1-piperazinyl)carbonyl]- (CA INDEX NAME)



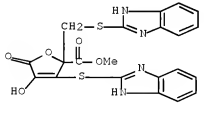
RN 577953-43-6 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-(1H-imidazol-2-ylthio)-2-[(1H-imidazol-2-ylthio)methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



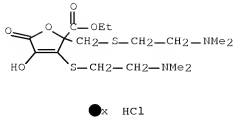
RN 577953-44-7 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[2-(diethylamino)ethyl]thio]-2-[[[2-(diethylamino)ethyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



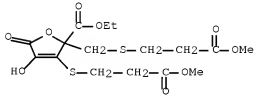
RN 577953-45-8 HCAPLUS
CN 2-Furancarboxylic acid, 3-(1H-benzimidazol-2-ylthio)-2-[(1H-benzimidazol-2-ylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, methyl ester (CA INDEX NAME)



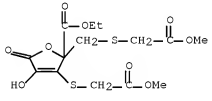
RN 577953-46-9 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[2-(dimethylamino)ethyl]thio]-2-[[[2-(dimethylamino)ethyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester, hydrochloride (1:?) (CA INDEX NAME)



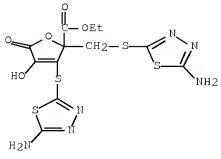
RN 577953-47-0 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(3-methoxy-3-oxopropyl)thio]-2-[[(3-methoxy-3-oxopropyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



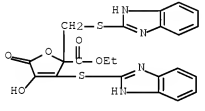
RN 577953-48-1 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(2-methoxy-2-oxoethyl)thio]-2-[[(2-methoxy-2-oxoethyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



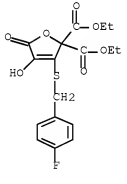
RN 577953-49-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(5-amino-1,3,4-thiadiazol-2-yl)thio]-2-[[(5-amino-1,3,4-thiadiazol-2-yl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



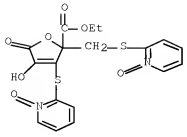
RN 577953-50-5 HCAPLUS
CN 2-Furancarboxylic acid, 3-(1H-benzimidazol-2-ylthio)-2-[(1H-benzimidazol-2-ylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



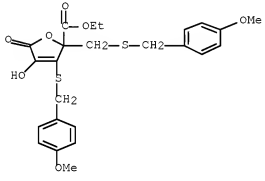
RN 577953-51-6 HCAPLUS
CN 2,2(5H)-Furandicarboxylic acid, 3-[[(4-fluorophenyl)methyl]thio]-4-hydroxy-5-oxo-, 2,2-diethyl ester (CA INDEX NAME)



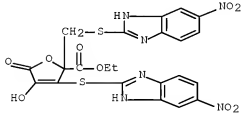
RN 577953-52-7 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(1-oxido-2-pyridinyl)thio]-2-[[(1-oxido-2-pyridinyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577953-53-8 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[[(4-methoxyphenyl)methyl]thio]-2-[[[(4-methoxyphenyl)methyl]thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577953-54-9 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(6-nitro-1H-benzimidazol-2-yl)thio]-2-[[(6-nitro-1H-benzimidazol-2-yl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



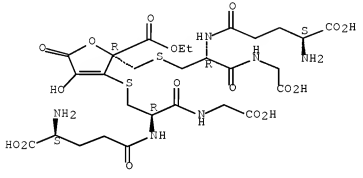
IT 577952-68-2P 657411-22-8P 657411-23-9P
657411-24-0P 657411-25-1P 657411-26-2P
657411-27-3P 657411-28-4P 657411-30-8P
657411-31-9P 657411-32-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of furanone cytoprotectants via aldol condensation for treatment of dermatol. conditions)

RN 577952-68-2 HCAPLUS

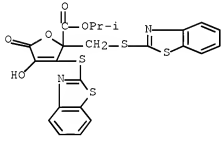
CN Glycine, L-γ-glutamyl-S-[(2R)-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine (9CI) (CA INDEX NAME)

Absolute stereochemistry.



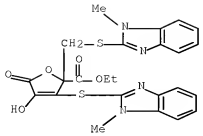
RN 657411-22-8 HCAPLUS

CN 2-Furancarboxylic acid, 3-(2-benzothiazolylthio)-2-[(2-benzothiazolylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, 1-methylethyl ester (CA INDEX NAME)

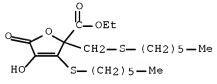


RN 657411-23-9 HCAPLUS

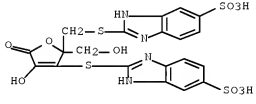
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(1-methyl-1H-benzimidazol-2-yl)thio]-2-[[(1-methyl-1H-benzimidazol-2-yl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



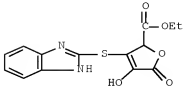
RN 657411-24-0 HCAPLUS
CN 2-Furancarboxylic acid, 3-(hexylthio)-2-[(hexylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



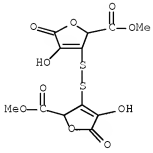
RN 657411-25-1 HCAPLUS
CN 1H-Benzimidazole-5-sulfonic acid, 2-[[[2,5-dihydro-4-hydroxy-2-(hydroxymethyl)-5-oxo-3-[(5-sulfo-1H-benzimidazol-2-yl)thio]-2-furanyl]methyl]thio]- (9CI) (CA INDEX NAME)



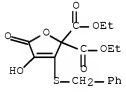
RN 657411-26-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-(1H-benzimidazol-2-ylthio)-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



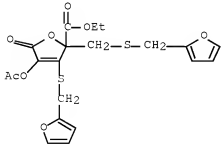
RN 657411-27-3 HCAPLUS
CN 2-Furancarboxylic acid, 3,3'-dithiobis[2,5-dihydro-4-hydroxy-5-oxo-, dimethyl ester (9CI) (CA INDEX NAME)



RN 657411-28-4 HCAPLUS
CN 2,2(5H)-Furandicarboxylic acid, 4-hydroxy-5-oxo-3-[(phenylmethyl)thio]-, 2,2-diethyl ester (CA INDEX NAME)

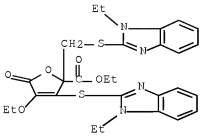


RN 657411-30-8 HCAPLUS
CN 2-Furancarboxylic acid, 4-(acetyloxy)-3-[(2-furanylmethyl)thio]-2-[[(2-furanylmethyl)thio]methyl]-2,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)

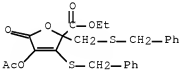


RN 657411-31-9 HCAPLUS
CN 2-Furancarboxylic acid, 4-ethoxy-3-[(1-ethyl-1H-benzimidazol-2-yl)thio]-2-[[(1-ethyl-1H-benzimidazol-2-yl)thio]methyl]-2,5-dihydro-5-oxo-, ethyl

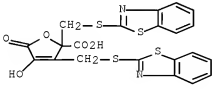
ester (CA INDEX NAME)



RN 657411-32-0 HCAPLUS
CN 2-Furancarboxylic acid, 4-(acetyloxy)-2,5-dihydro-5-oxo-3-[(phenylmethyl)thio]-2-[[(phenylmethyl)thio]methyl]-, ethyl ester (CA INDEX NAME)



IT 577952-77-3, 2,3-Bis(benzothiazol-2-ylsulfanylmethyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of furanone cytoprotectants via aldol condensation for treatment of dermatol. conditions)
RN 577952-77-3 HCAPLUS
CN 2-Furancarboxylic acid, 2,3-bis[(2-benzothiazolylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo- (CA INDEX NAME)



L45 ANSWER 2 OF 2 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-671485 [63] WPIX
CROSS REFERENCE: 2005-195970
DOC. NO. CPI: C2005-224213 [76]

TITLE: New furanone derivatives are interleukin-1-beta induction inhibitors, useful in for treating e.g. stroke, Alzheimer's disease and senile dementia

DERWENT CLASS: B02; B03

INVENTOR: BALZO U D; BODDUPALLI S; BROWN L; DEL BALZO U; SONG J; WALKINSHAW G; WANG B; ZHANG W

PATENT ASSIGNEE: (BALZ-I) BALZO U D; (BODD-I) BODDUPALLI S; (BROW-I) BROWN L; (GALI-N) GALILEO LAB INC; (GALI-N) GALILEO PHARM INC; (SONG-I) SONG J; (WALK-I) WALKINSHAW G; (WANG-I) WANG B; (ZHAN-I) ZHANG W

COUNTRY COUNT: 101

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2003064403	A1	20030807	(200363)*	EN	45[0]	
US 20030176361	A1	20030918	(200368)	EN		
US 6667330	B2	20031223	(200408)	EN		
US 20040029812	A1	20040212	(200412)	EN		
AU 2003207750	A1	20030902	(200422)	EN		
EP 1478634	A1	20041124	(200477)	EN		
AU 2003207750	A2	20030902	(200525)	EN		
NZ 534305	A	20051028	(200581)	EN		
JP 2006502963	W	20060126	(200609)	JA	111	
MX 2004007292	A1	20051201	(200628)	ES		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003064403 A1		WO 2003-US2766	20030130
US 20030176361 A1	Provisional	US 2002-353939P	20020131
US 6667330 B2	Provisional	US 2002-353939P	20020131
US 20040029812 A1	Provisional	US 2002-353939P	20020131
US 20030176361 A1		US 2003-354474	20030128
US 6667330 B2		US 2003-354474	20030128
AU 2003207750 A1		AU 2003-207750	20030130
AU 2003207750 A2		AU 2003-207750	20030130
EP 1478634 A1		EP 2003-705988	20030130
JP 2006502963 W		JP 2003-564026	20030130
NZ 534305 A		NZ 2003-534305	20030130
US 20040029812 A1	CIP of	US 2003-354474	20030130
EP 1478634 A1		WO 2003-US2766	20030130
NZ 534305 A		WO 2003-US2766	20030130
JP 2006502963 W		WO 2003-US2766	20030130
US 20040029812 A1		US 2003-630170	20030730
MX 2004007292 A1		WO 2003-US2766	20030130
MX 2004007292 A1		MX 2004-7292	20040728

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
AU 2003207750	A1	Based on	WO 2003064403	A
EP 1478634	A1	Based on	WO 2003064403	A
AU 2003207750	A2	Based on	WO 2003064403	A
NZ 534305	A	Based on	WO 2003064403	A
JP 2006502963	W	Based on	WO 2003064403	A
MX 2004007292	A1	Based on	WO 2003064403	A

PRIORITY APPLN. INFO: US 2002-353939P 20020131
US 2003-354474 20030128
US 2003-354474 20030130
US 2003-630170 20030730

AB WO 2003064403 A1 UPAB: 20060502
NOVELTY - Furanone derivatives (I/II) their tautomers and/or stereoisomers or salts are new.

DETAILED DESCRIPTION - Furanone derivatives of formulae (I) and (II), their tautomers and/or stereoisomers or salts are new.

R1 = heterocyclyl, heterocyclyl-alkyl, heteroaryl, or heteroaralkyl (all optionally substituted), -CO(O)Ra, -C(O)NRaRb, -CH2CORc or cyano;

R2, R3 and R7 = (cyclo)alkyl, (hetero)aryl, (hetero)aralkyl, heterocyclyl, nucleoside, amino acid or di - tetra-peptide (all optionally substituted);

R4 and R8 = H, alkylcarbonyl, alkyl, (poly)alkoxyalkylene or dialkoxyphosphoryloxy;

X = lower alkylene, NRa, S, S(O) or S(O)2; or

XR2 and YR3 = -P(O)(ORa)2;

Y = N(Ra), S, S(O), or S(O)2; or

XR2+YR3 = optionally substituted aliphatic or aromatic ring;

Ra = (cyclo)alkyl or aryl (both optionally substituted), H, alkenyl or phosphoryl;

Rb and R'b = alkyl or aryl (both optionally substituted), H, or alkenyl; or

NRaNRb and NR'aR'b = 5 - 7 membered optionally saturated aromatic ring optionally containing at least one of N, O or S (optionally substituted with at least one halo, cyano, alkylthio, lower alkoxy, carboxy, benzyl, oxo, or optionally substituted lower alkyl);

Rc = (cyclo)alkyl or aryl (both optionally substituted), H, alkenyl or phosphoryl or acyl;

R5 = heterocyclyl or heteroaryl (both optionally substituted), -CO(O)R'a, -C(O)NR'aR'b, -CH2CORd, C(O)R'c or cyano;

R6 = heterocyclyl, alkyl or (hetero)aryl (all optionally substituted), H, -CO(O)R'a, -C(O)NR'aR'b, -CH2ORd, -C(O)R'c or cyano; or

CR5R6 = optionally substituted ring;

CR5 and Y'R7 = optionally substituted heterocyclic ring;

Y' = N(R'a), S, S(O) or S(O)2;

R'a = (cyclo)alkyl or aryl (both optionally substituted), H or alkenyl;

R'c = alkyl or aryl (both optionally substituted);

Rd = (cyclo)alkyl or aryl (both optionally substituted), H, alkenyl, or acyl.

Provided that:

(1) when X is lower alkylene, then R2 is other than optionally substituted alkyl;

(2) the furanone derivative is other than 4-hydroxy-3-methanesulfonyl-2-methane-sulfonylmethyl-5-oxo-2,5-dihydro- furan-2-carboxylic acid ethyl ester; and

(3) when R6 is alkyl, then R7 is optionally substituted heterocyclyl, heteroaryl or heteroaralkyl.

An INDEPENDENT CLAIM is included for use of at least one of (I) or (II) for the manufacture of a medicament for the treatment or prevention of a condition mediated by oxidative stress.

ACTIVITY - Immunomodulator; Cerebroprotective; Vasotropic; Neuroprotective; Ophthalmological; Tranquilizer; Vulnerary; Nootropic; Cardiant; Antiinflammatory; Antiparkinsonian; Anticonvulsant; Neuroleptic; Antidepressant; Antidiabetic; Nephrotropic; Gynecological; Antiasthmatic; Respiratory-Gen; Antirheumatic; Antiarthritic; Relaxant; Anti-HIV; Antiseborrheic; Dermatological; Radioprotective; Antipsoriatic.

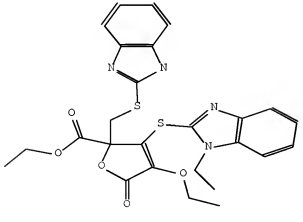
MECHANISM OF ACTION - Interleukin (IL)-1beta induction inhibitor.

The efficacy of 4-hydroxy-5-oxo-3-(4-trifluoromethyl-pyrimidin-2-ylsulfanyl)-2-(4-trifluoromethyl-pyrimidin-2-ylsulfanylmethyl)-2,5-dihydro-furan-2-carboxylic acid ethyl ester (A) to inhibit IL-1beta induction was evaluated in mouse microglial cell line. The cells (10000 cells/well) were seeded in poly-d-lysine coated 96-well plates and stimulated by addition of lipopolysaccharide (10 ng/ml) and interferon gamma (10 ng/ml) in the presence of (A). The cells were incubated at 37 degrees C for 24 hours and then the media was removed. The media was analyzed for IL-1beta by enzyme linked immunosorbent assay (ELISA) using IL-1beta capture antibodies and detection antibodies. (A) inhibited IL-1beta induction at an EC50 value of at most 20 micro-M.

USE - As a medicament for the treatment and prevention of a condition involving oxidative stress, autoimmune or inflammatory components (e.g. stroke, cerebral ischemia, retinal ischemia, post-surgical cognitive dysfunction, peripheral neuropathy, spinal cord injury, head injury and surgical trauma), and conditions involving neuroinflammation and neurodegenerative disease (e.g. Alzheimer's disease and senile dementia) (claimed). Also for treating myocardial infarction, cognitive disorder, cerebral palsy, epilepsy, amyotrophic lateral sclerosis, Huntington's disease, psychosis, schizophrenia, depression, Parkinson's disease, Friedreich's disease, Down's syndrome, Creutzfeldt-Jakob's syndrome, diabetes, renal disease, pre-menstrual syndrome, asthma, cardiopulmonary inflammatory disorders, chronic heart failure, HIV-related dementia, rheumatoid arthritis and muscle fatigue; for preventing and protecting skin tissue against age-related damage resulting from harmful radiation, contact dermatitis, skin irritations, skin pigmentation, acne and psoriasis; and for preservation of allograft tissue for transplantation.

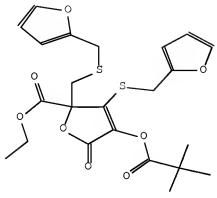
ADVANTAGE - The furanone derivatives are potent neuroprotective agents and restore metabolic integrity in oxidatively competent cells subjected to oxygen deprivation.

AN.S DCR-772840
CN.S 2-(1H-Benzoimidazol-2-ylsulfanylmethyl)-4-ethoxy-3-(1-ethyl-1H-benzoimidazol-2-ylsulfanyl)-5-oxo-2,5-dihydro-furan-2-carboxylic acid ethyl ester
SDCN RABLAE

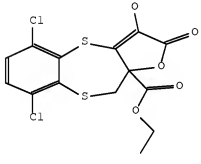


AN.S DCR-772828
CN.S 4-(2,2-Dimethyl-propionyloxy)-3-(furan-2-ylmethylsulfanyl)-2-(furan-2-ylmethylsulfanylmethyl)-5-oxo-2,5-dihydro-furan-2-carboxylic acid ethyl

ester
SDCN RABLA2



AN.S DCR-772820
CN.S 5,8-Dichloro-3-hydroxy-2-oxo-2H-1-oxa-4,9-dithia-benzo[f]azulene-10a-carboxylic acid ethyl ester
SDCN RABL9U



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FILE COVERS 1907 - 17 Sep 2009  VOL 151 ISS 12
FILE LAST UPDATED: 16 Sep 2009  (20090916/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Jun 2009

HCAplus now includes complete International Patent Classification (IPC)
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'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> D STAT QUE L25
L1              STR
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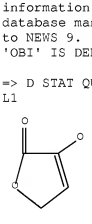

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Structure attributes must be viewed using STN Express query preparation.
L6         8276 SEA FILE=REGISTRY SSS FUL L1
L8              STR
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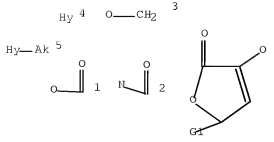

G1 [@1],[@2],[@3],[@4],[@5]

Structure attributes must be viewed using STN Express query preparation.

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L11         821 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L10
L12        6489 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  ACNE/CT OR SKIN,
                DISEASE+OLD,NT/CT (L) ROSACEA/OBI
L13       20206 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  DERMATITIS+NT/CT
L14           6 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L11 AND (L12 OR L13)
L15       69130 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  UV RADIATION+OLD,NT/CT

L16           5 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L11 AND L15
L17       10603 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  (UV LIGHT/OBI)
L18       32750 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  (ULTRAVIOLET/OBI OR
                ULTRA VIOLET/OBI)(2A)(LIGHT/OBI)
L19           2 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L11 AND (L17 OR L18)
L25          12 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  (L14 OR L16 OR L19)


=> S L25 NOT L24
L46          11 L25 NOT L24

=> D STAT QUE L38
L1              STR
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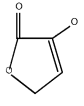

Structure attributes must be viewed using STN Express query preparation.

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L6          8276 SEA FILE=REGISTRY SSS FUL L1
L34             STR
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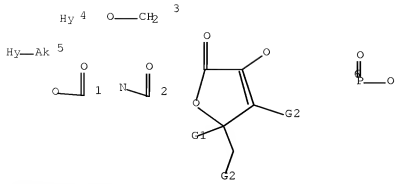

G1 [@1],[@2],[@3],[@4],[@5]
G2 S,N,[@6]

Structure attributes must be viewed using STN Express query preparation.
L36 105 SEA FILE=REGISTRY SUB=L6 SSS FUL L34
L38 2 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L36

=> S L38 NOT L24
L47 1 L38 NOT L24

=> S L46,L47
L48 12 (L46 OR L47)

=> FILE WPIX
FILE 'WPIX' ENTERED AT 14:08:44 ON 17 SEP 2009
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FILE LAST UPDATED: 15 SEP 2009 <20090915/UP>
MOST RECENT UPDATE: 200959 <200959/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE
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>>> IPC, ECLA, US National Classifications and Japanese F-Terms
and FI-Terms have been updated with reclassifications to
mid-June 2009.
No update date (UP) has been created for the reclassified
documents, but they can be identified by
specific update codes (see HELP CLA for details)<<<

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'BI,ABEX' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE

=> D STAT QUE L30
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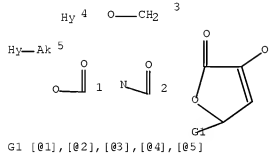

G1 [@1],[@2],[@3],[@4],[@5]

Structure attributes must be viewed using STN Express query preparation.
L28 46 SEA FILE=WPIX SSS FUL L8
L29 28 SEA FILE=WPIX SPE=ON ABB=ON PLU=ON L28/DCR
L30 21 SEA FILE=WPIX SPE=ON ABB=ON PLU=ON L29 AND (PRY<=2002 OR AY<=2002 OR PY<=2002 OR PD<=2002)

=> S L30 NOT L31
L49 20 L30 NOT L31

=> FILE MARPAT
FILE 'MARPAT' ENTERED AT 14:09:10 ON 17 SEP 2009
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(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 20090192215 30 JUL 2009
DE 102008054480 16 JUL 2009
EP 2080806 22 JUL 2009
JP 2009170146 30 JUL 2009
WO 2009097414 06 AUG 2009
GB 2453808 22 APR 2009
FR 2926817 31 JUL 2009
RU 2362301 27 JUL 2009
CA 2421889 14 JUL 2009

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http://www.cas.org/support/stngen/stndoc/marpat.html.

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=> D STAT QUE L44
L8                  STR
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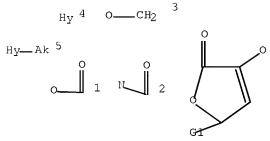

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G1 [@1],[@2],[@3],[@4],[@5]
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Structure attributes must be viewed using STN Express query preparation.
L34                 STR
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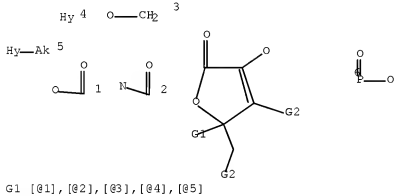

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G1 [@1],[@2],[@3],[@4],[@5]
G2 S,N,[@6]
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L42          314 SEA FILE=MARPAT SSS FUL L8
L44           27 SEA FILE=MARPAT SUB=L42 SSS FUL L34

100.0% PROCESSED     142 ITERATIONS                              27 ANSWERS
SEARCH TIME: 00.00.01


=> DUP REM L48 L49 L44
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PROCESSING COMPLETED FOR L48
PROCESSING COMPLETED FOR L49
PROCESSING COMPLETED FOR L44
L50          58 DUP REM L48 L49 L44 (1 DUPLICATE REMOVED)
                ANSWERS '1-12' FROM FILE HCAPLUS
                ANSWERS '13-32' FROM FILE WPIX
                ANSWERS '33-58' FROM FILE MARPAT

=> D IBIB ED ABS HITSTR 1-12; D IBIB AB HITSTR 13-32; D IBIB AB QHIT 33-58

L50  ANSWER 1 OF 58  HCAPLUS  COPYRIGHT 2009 ACS on STN DUPLICATE 1
ACCESSION NUMBER:         2003:610432  HCAPLUS  Full-text
DOCUMENT NUMBER:          139:179965
TITLE:                    Preparation of furanones as cytoprotectants for
                          neuroinflammation and neurodegenerative disorders
INVENTOR(S):              Wang, Bing; Zhang, Wei; Song, Jiangao; Del Balzo,
                          Ughetta; Brown, Lesley; Walkinshaw, Gail
PATENT ASSIGNEE(S):       Galileo Laboratories, Inc., USA
SOURCE:                   PCT Int. Appl., 89 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.            KIND   DATE        APPLICATION NO.          DATE
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     WO 2003064403          A1    20030807    WO 2003-US2766           20030130
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2474871             A1    20030807    CA 2003-2474871          20030130
     AU 2003207750          A2    20030902    AU 2003-207750           20030130
     EP 1478634             A1    20041124    EP 2003-705988           20030130
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     NZ 534305              A     20051028    NZ 2003-534305           20030130
     JP 2006502963          T     20060126    JP 2003-564026           20030130
PRIORITY APPLN. INFO.:                        US 2002-353939P      P   20020131
                                              WO 2003-US2766       W   20030130

OTHER SOURCE(S):          MARPAT 139:179965
ED   Entered STN:  08 Aug 2003
GI
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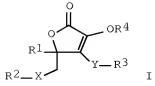
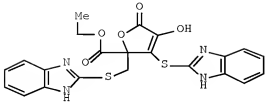


I



II

AB Title compds. I [wherein R1 = CO2R', CONR'R'', CH2OR''', CN, (un)substituted heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl; R2, R3 = independently (un)substituted alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, nucleoside, amino acid, di-, tri- or tetra-peptide; R4 = H, alkyl, alkylcarbonyl, (poly)alkoxyalkylene, dialkoxyphosphoryloxy; X = alkylene, NR', S, SO, SO2; or XR2 = PO(OR')2; Y = NR', S, SO, SO2; or YR3 = PO(OR')2; or XR2YR3 = (un)substituted aliphatic or aromatic ring; R' = H, alkenyl, (un)substituted alkyl, cycloalkyl, phosphoryl, aryl; R'' = H, alkenyl, (un)substituted alkyl, aryl; or R'R'' = atoms that form (un)substituted 5-7 membered aryl, heteroaryl ring; R''' = H, alkenyl, (un)substituted alkyl, acyl, cycloalkyl, phosphoryl, aryl; with the proviso that the compound is not 4-hydroxy-3-methanylsulfonyl-2-methanylsulfonylmethyl-5-oxo-2,5- dihydrofuran-2-carboxylic acid Et ester; and further with the proviso that when X = alkylene, R2 ≠ (un)substituted alkyl; and their single tautomers, single stereoisomers, mixts. of tautomers and/or stereoisomers, and pharmaceutically acceptable salts] were prepared as cytoprotectants for neuroinflammation and neurodegenerative disorders. For example, II was prepared by reaction of 2-mercaptobenzimidazole with Et bromopyruvate in ethanol/acetone and aldol condensation of the two tautomeric forms of the pyruvate intermediate. Selected invention compds. showed significant reduction in edema in assays assessing mouse ear inflammatory response to topical arachidonic acid (10% to 70%, $p < 0.05$). Results from neuronal cell stress assay, myocyte calcium-contractility assay, and rat middle cerebral artery occlusion model were disclosed for selected invention compds. Thus, I and their pharmaceutical formulations are useful in the treatment of stroke, cerebral ischemia, myocardial infarction, myocardial ischemia, chronic heart failure, inflammation and other oxidative stress-related conditions, and Alzheimer's disease and senile dementia (no data).

IT 577952-58-0P 577952-60-4P 577952-61-5P
RL: PAC (Pharmacological activity); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(cytoprotective agent; preparation of furanone cytoprotectants via aldol condensation for treatment of neuroinflammation and neurodegenerative disorders)

RN 577952-58-0 HCAPLUS

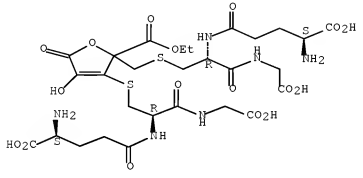
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether

with L-γ-glutamyl-L-cysteinylglycine, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 577952-57-9
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.

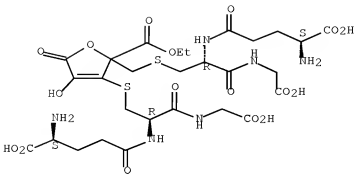


CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 577952-60-4 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

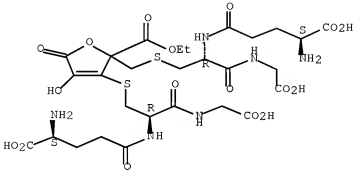


●2 HCl

RN 577952-61-5 HCAPLUS

CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●2 HBr

IT 577952-47-7P 577952-51-3P 577952-69-3P
577952-70-6P 577952-71-7P 577952-97-7P
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cytoprotective agent; preparation of furanone cytoprotectants via aldol condensation for treatment of neuroinflammation and neurodegenerative disorders)

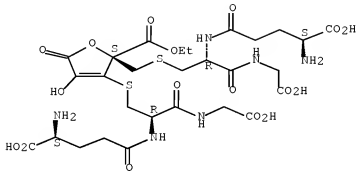
RN 577952-47-7 HCAPLUS

CN Glycine, L-γ-glutamyl-S-[(2S)-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 577952-46-6
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.

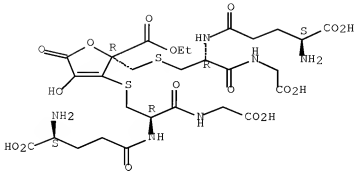


CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 577952-51-3 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[(2R)-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dihydrobromide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●2 HBr

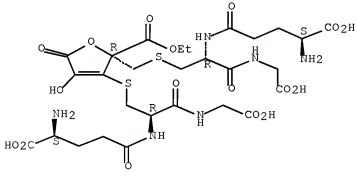
RN 577952-69-3 HCAPLUS

CN Glycine, L-γ-glutamyl-S-[(2R)-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, bis(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 577952-68-2
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.

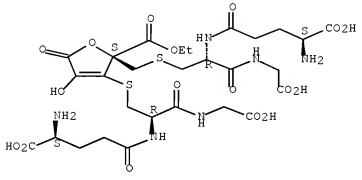


CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 577952-70-6 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[(2S)-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dihydrobromide (9CI) (CA INDEX NAME)

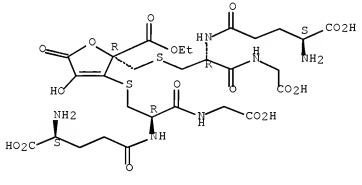
Absolute stereochemistry.



●2 HBr

RN 577952-71-7 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[(2R)-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

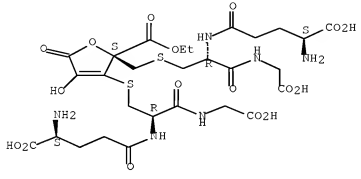


●2 HCl

RN 577952-97-7 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[(2S)-2-(ethoxycarbonyl)-2,5-dihydro-4-

hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



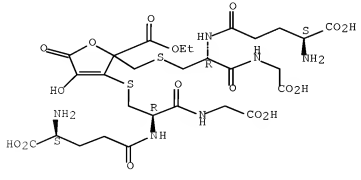
●2 HCl

IT 577952-57-9P 577952-80-8P, 4-Hydroxy-5-oxo-3-(2-furanylmethylsulfanyl)-2-[(2-furanylmethylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-84-2P, 4-(1H-Benzimidazol-2-ylsulfanyl)-5-[(1H-benzimidazol-2-ylsulfanyl)methyl]-3-hydroxy-5-hydroxymethyl-5H-furan-2-one RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(cytoprotective agent; preparation of furanone cytoprotectants via aldol condensation for treatment of neuroinflammation and neurodegenerative disorders)

RN 577952-57-9 HCAPLUS

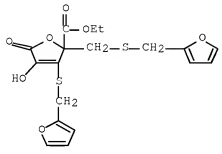
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine (9CI) (CA INDEX NAME)

Absolute stereochemistry.

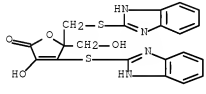


RN 577952-80-8 HCAPLUS

CN 2-Furancarboxylic acid, 3-[(2-furanylmethyl)thio]-2-[[(2-furanylmethyl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577952-84-2 HCAPLUS
CN 2(5H)-Furanone, 4-(1H-benzimidazol-2-ylthio)-5-[(1H-benzimidazol-2-ylthio)methyl]-3-hydroxy-5-(hydroxymethyl)- (CA INDEX NAME)



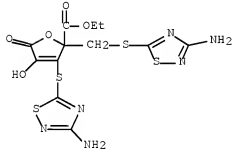
IT 577952-48-8P, 3-(3-Amino-[1,2,4]thiadiazol-5-ylsulfanyl)-2-(((3-amino-[1,2,4]thiadiazol-5-yl)sulfanyl)methyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-49-9P, 3-(3-Amino-[1,2,4]thiadiazol-5-ylsulfanyl)-2-(((3-amino-[1,2,4]thiadiazol-5-yl)sulfanyl)methyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester, trimethylamine salt 577952-50-2P, 3-((5-Amino-2H-[1,2,4]triazol-3-yl)sulfanyl)-2-(((5-amino-2H-[1,2,4]triazol-3-yl)sulfanyl)methyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-52-4P, 4-Hydroxy-5-oxo-3-(5-phenyl-[1,3,4]oxadiazol-2-ylsulfanyl)-2-(5-phenyl-[1,3,4]oxadiazol-2-ylsulfanylmethyl)-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-53-5P, 3-(5-Chlorobenzothiazol-2-ylsulfanyl)-2-[(5-chloro-benzothiazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-54-6P, 4-Hydroxy-3-(5-methoxy-1H-benzimidazol-2-ylsulfanyl)-2-[(5-methoxy-1H-benzimidazol-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-55-7P, 4-Hydroxy-5-oxo-3-(p-tolylsulfanyl)-2-(p-tolylsulfanylmethyl)-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-56-8P 577952-62-6P 577952-63-7P 577952-64-8P 577952-65-9P 577952-66-0P 577952-67-1P 577952-72-8P 577952-73-9P, 4-Hydroxy-5-oxo-3-(pyridin-4-ylsulfanyl)-2-[(pyridin-4-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-75-1P,

3-(1H-Benzimidazol-2-ylsulfanyl)-2-[(1H-benzimidazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid 577952-76-2P, 3-(Benzothiazol-2-ylsulfanyl)-2-[(benzothiazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid (2-hydroxyethyl)amide 577952-79-5P, 4-(Furan-2-ylmethylsulfanyl)-5-[(furan-2-ylmethylsulfanyl)methyl]-3-hydroxy-5-hydroxymethyl-5H-furan-2-one 577952-81-9P, 4-(2,2-Dimethylpropionyloxy)-3-(furan-2-ylmethylsulfanyl)-2-[(furan-2-ylmethylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-82-0P 577952-83-1P 577952-85-3P, 4-(1H-Benzimidazol-2-ylsulfanyl)-5-[(1H-benzimidazol-2-ylsulfanyl)methyl]-3-hydroxy-5-(thiazol-2-yl)-5H-furan-2-one 577952-86-4P, 3-(Benzothiazol-2-ylsulfanyl)-2-[(benzothiazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid 577952-87-5P, 3-(2-Chloro-4-fluorophenylsulfanyl)-2-[(2-chloro-4-fluorophenylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-88-6P 577952-89-7P, 4-(Benzoxazol-2-ylsulfanyl)-5-[(benzoxazol-2-ylsulfanyl)methyl]-3-hydroxy-5-hydroxymethyl-5H-furan-2-one 577952-90-0P, 4-(5-Chlorobenzothiazol-2-ylsulfanyl)-5-[(5-chlorobenzothiazol-2-ylsulfanyl)methyl]-3-hydroxy-5-hydroxymethyl-5H-furan-2-one 577952-91-1P, 4-(Benzothiazol-2-ylsulfanyl)-5-[(benzothiazol-2-ylsulfanyl)methyl]-3-hydroxy-5-hydroxymethyl-5H-furan-2-one 577952-92-2P, 3-(2-Chloro-6-fluorobenzylsulfanyl)-2-[(2-chloro-6-fluorobenzylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-93-3P, 3-(5,6-Dichloro-1H-benzimidazol-2-ylsulfanyl)-2-[(5,6-dichloro-1H-benzimidazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-94-4P, 4-Hydroxy-3-(5-methoxybenzothiazol-2-ylsulfanyl)-2-[(5-methoxybenzothiazol-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-95-5P, 3-(2,4-Dichlorobenzylsulfanyl)-2-[(2,4-dichlorobenzylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-96-6P, 2-[(Benzothiazol-2-ylsulfinyl)methyl]-3-(benzothiazol-2-ylsulfanyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-98-8P, 4-Hydroxy-3-(6-nitrobenzothiazol-2-ylsulfanyl)-2-[(6-nitrobenzothiazol-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577952-99-9P, 2-[(1H-Benzimidazol-2-ylsulfanyl)methyl]-4-ethoxy-3-(1-ethyl-1H-benzimidazol-2-ylsulfanyl)-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-00-5P, 3-[Furan-2-ylmethanesulfinyl]-2-((furan-2-ylmethanesulfinyl)methyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-01-6P, 2-[(Furan-2-ylmethanesulfinyl)methyl]-3-(furan-2-ylmethanesulfonyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-02-7P, 4-Hydroxy-3-methylsulfanyl-2-methylsulfanylmethyl-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-03-8P***, 3-(5-Amino-[1,3,4]thiadiazol-2-ylsulfanyl)-2-({(5-amino-[1,3,4]thiadiazol-2-yl)sulfanyl}methyl)-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ***577953-04-9P, 3-(Benzoxazol-2-ylsulfanyl)-2-[(benzothiazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid methyl ester 577953-05-0P 577953-07-2P, 3-(Furan-2-ylmethylsulfanyl)-2-[(furan-2-ylmethylsulfanyl)methyl]-4-isobutanoyloxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-08-3P, 4-(2,2-Dimethylpropanoyloxy)-3-ethoxycarbonylmethylsulfanyl-2-[(ethoxycarbonylmethylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-09-4P, 4-Hydroxy-5-oxo-3-(4-phenylthiazol-2-ylsulfanyl)-2-[(4-phenylthiazol-2-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester

577953-10-7P, 3-(2-Dimethylaminoethylsulfanyl)-2-[(2-dimethylaminoethylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid 577953-11-8P, 4-Hydroxy-3-[(1-methyl-1H-imidazol-2-yl)sulfanyl]-2-[(1-methyl-1H-imidazol-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-12-9P, 3-Cyclopentylsulfanyl-2-cyclopentylsulfanylmethyl-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-13-0P, 3-Butylsulfanyl-2-butylsulfanylmethyl-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-14-1P, 4-Hydroxy-3-isobutylsulfanyl-2-isobutylsulfanylmethyl-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-15-2P, 4-Hydroxy-3-(naphthalen-2-ylsulfanyl)-2-[(naphthalen-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-16-3P, 4-Hydroxy-5-oxo-3-[(1-phenyl-1H-tetrazol-5-yl)sulfanyl]-2-[[(1-phenyl-1H-tetrazol-5-yl)sulfanyl]methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-17-4P, 4-Hydroxy-5-oxo-3-((5-phenyl-2H-[1,2,4]triazol-3-yl)sulfanyl)-2-(((5-phenyl-2H-[1,2,4]triazol-3-yl)sulfanyl)methyl)-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-18-5P, 4-Hydroxy-5-oxo-3-(thiazol-2-ylsulfanyl)-2-[(thiazol-2-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-19-6P, 3-Benzylsulfanyl-2-benzylsulfanylmethyl-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-20-9P, 4-Hydroxy-3-(4-methoxyphenylsulfanyl)-2-[(4-methoxyphenylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-21-0P, 3-(2-Chlorophenylsulfanyl)-2-[(2-chlorophenylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-22-1P, 3-(Benzothiazol-2-ylsulfanyl)-2-[(benzothiazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-23-2P, 3-(Benzoxazol-2-ylsulfanyl)-2-[(benzoxazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-24-3P, 4-Hydroxy-5-oxo-3-(4-trifluoromethylpyrimidin-2-ylsulfanyl)-2-[(4-trifluoromethylpyrimidin-2-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-25-4P, 4-Hydroxy-3-(4-methylpyrimidin-2-ylsulfanyl)-2-[(4-methylpyrimidin-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-26-5P, 4-Hydroxy-5-oxo-3-(pyrimidin-2-ylsulfanyl)-2-[(pyrimidin-2-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-27-6P, 4-Hydroxy-5-oxo-3-(2-sulfo-ethylsulfanyl)-2-[(2-sulfo-ethylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-28-7P, 4-Hydroxy-5-oxo-3-(7-trifluoromethylquinolin-4-ylsulfanyl)-2-[(7-trifluoromethylquinolin-4-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-29-8P 577953-30-1P 577953-31-2P, 3-Cyclohexylsulfanyl-2-cyclohexylsulfanylmethyl-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-38-9P, 3-(Benzoselenazol-2-ylsulfanyl)-2-[(benzoselenazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-40-3P 577953-41-4P, 4-Hydroxy-5-oxo-3-(9H-purin-6-ylsulfanyl)-2-[(9H-purin-6-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-42-5P 577953-43-6P, 4-Hydroxy-3-(1H-imidazol-2-ylsulfanyl)-2-[(1H-imidazol-2-ylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-44-7P, 3-(2-Diethylaminoethylsulfanyl)-2-[(2-diethylaminoethylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-45-8P, 3-(1H-Benzimidazol-2-ylsulfanyl)-2-[(1H-benzimidazol-2-ylsulfanyl)methyl]-

4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid methyl ester 577953-46-9P, 3-(2-Dimethylaminoethylsulfanyl)-2-[(2-dimethylaminoethylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester hydrochloride 577953-47-0P, 4-Hydroxy-3-(2-methoxycarbonylethylsulfanyl)-2-[(2-methoxycarbonylethylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-48-1P, 4-Hydroxy-3-(methoxycarbonylmethylsulfanyl)-2-[(methoxycarbonylmethylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-49-2P, 3-(5-Amino-[1,3,4]thiadiazol-2-ylsulfanyl)-2-[((5-amino-[1,3,4]thiadiazol-2-yl)sulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-50-5P, 3-(1H-Benzimidazol-2-ylsulfanyl)-2-[(1H-benzimidazol-2-ylsulfanyl)methyl]-4-hydroxy-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-52-7P, 4-Hydroxy-5-oxo-3-(1-oxopyridin-2-ylsulfanyl)-2-[(1-oxopyridin-2-ylsulfanyl)methyl]-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-53-8P, 4-Hydroxy-3-(4-methoxybenzylsulfanyl)-2-[(4-methoxybenzylsulfanyl)methyl]-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester 577953-54-9P, 4-Hydroxy-3-(5-nitro-1H-benzimidazol-2-ylsulfanyl)-2-((5-nitro-1H-benzimidazol-2-ylsulfanyl)methyl)-5-oxo-2,5-dihydrofuran-2-carboxylic acid ethyl ester
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(cytoprotective agent; preparation of furanone cytoprotectants via aldol condensation for treatment of neuroinflammation and neurodegenerative disorders)

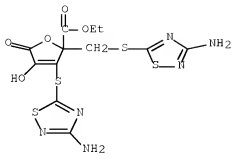
RN 577952-48-8 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(3-amino-1,2,4-thiadiazol-5-yl)thio]-2-[[(3-amino-1,2,4-thiadiazol-5-yl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577952-49-9 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(3-amino-1,2,4-thiadiazol-5-yl)thio]-2-[[(3-amino-1,2,4-thiadiazol-5-yl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester, compd. with N,N-dimethylmethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

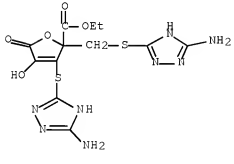
CRN 577952-48-8
CMF C12 H12 N6 O5 S4



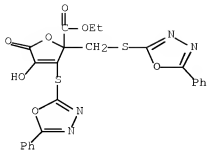
CM 2

CRN 75-50-3
CMF C3 H9 N

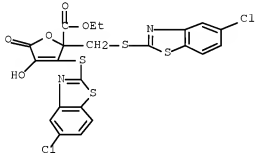
RN 577952-50-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(3-amino-1H-1,2,4-triazol-5-yl)thio]-2-[[(3-amino-1H-1,2,4-triazol-5-yl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



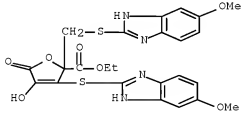
RN 577952-52-4 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(5-phenyl-1,3,4-oxadiazol-2-yl)thio]-2-[[(5-phenyl-1,3,4-oxadiazol-2-yl)thio]methyl]-, ethyl ester (CA INDEX NAME)



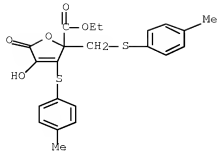
RN 577952-53-5 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(5-chloro-2-benzothiazolyl)thio]-2-[[(5-chloro-2-benzothiazolyl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577952-54-6 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(6-methoxy-1H-benzimidazol-2-yl)thio]-2-[[(6-methoxy-1H-benzimidazol-2-yl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)

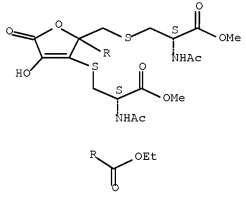


RN 577952-55-7 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(4-methylphenyl)thio]-2-[[(4-methylphenyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577952-56-8 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[(2S)-2-(acetylamino)-3-methoxy-3-oxopropyl]thio]-2-[[[(2S)-2-(acetylamino)-3-methoxy-3-oxopropyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

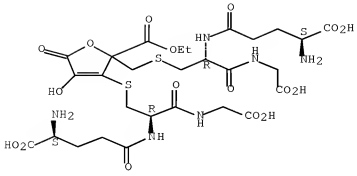


RN 577952-62-6 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, dimethanesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 577952-57-9
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.



CM 2

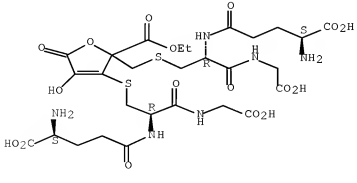
CRN 75-75-2
CMF C H4 O3 S

RN 577952-63-7 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, mono(4-methylbenzenesulfonate) (salt) (9CI) (CA INDEX NAME)

CM 1

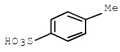
CRN 577952-57-9
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.



CM 2

CRN 104-15-4
CMF C7 H8 O3 S

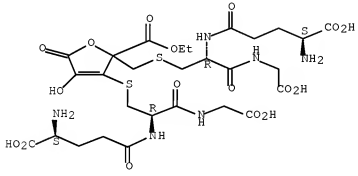


RN 577952-64-8 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, diacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 577952-57-9
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.



CM 2

CRN 64-19-7
CMF C2 H4 O2

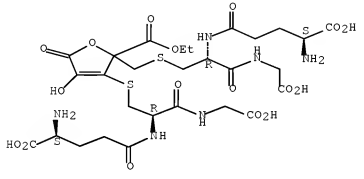
RN 577952-65-9 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether

with L-γ-glutamyl-L-cysteinylglycine, compd. with
N,N-diethylethanamine (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 577952-57-9
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.



CM 2

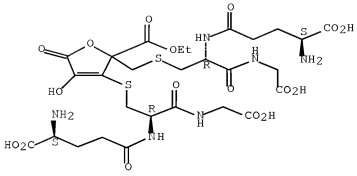
CRN 121-44-8
CMF C6 H15 N

RN 577952-66-0 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-
(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether
with L-γ-glutamyl-L-cysteinylglycine, compd. with
N,N-diethylethanamine (1:4) (9CI) (CA INDEX NAME)

CM 1

CRN 577952-57-9
CMF C28 H40 N6 O17 S2

Absolute stereochemistry.

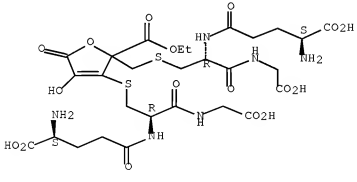


CM 2

CRN 121-44-8
CMF C6 H15 N

RN 577952-67-1 HCAPLUS
CN Glycine, L-γ-glutamyl-S-[2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-2-(mercaptomethyl)-5-oxo-3-furanyl]-L-cysteinyl-, (2→2')-thioether with L-γ-glutamyl-L-cysteinylglycine, disodium salt (9CI) (CA INDEX NAME)

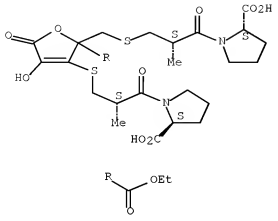
Absolute stereochemistry.



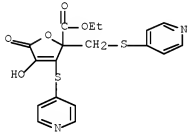
2 Na

RN 577952-72-8 HCAPLUS
CN L-Proline, 1-[(2S)-3-[[[3-[[(2S)-3-[(2S)-2-carboxy-1-pyrrolidinyl]-2-methyl-3-oxopropyl]thio]-2-(ethoxycarbonyl)-2,5-dihydro-4-hydroxy-5-oxo-2-furanyl]methyl]thio]-2-methyl-1-oxopropyl]- (CA INDEX NAME)

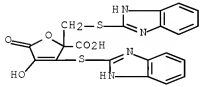
Absolute stereochemistry.



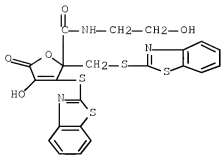
RN 577952-73-9 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-(4-pyridinylthio)-2-[(4-pyridinylthio)methyl]-, ethyl ester (CA INDEX NAME)



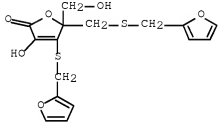
RN 577952-75-1 HCAPLUS
CN 2-Furancarboxylic acid, 3-(1H-benzimidazol-2-ylthio)-2-[(1H-benzimidazol-2-ylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo- (CA INDEX NAME)



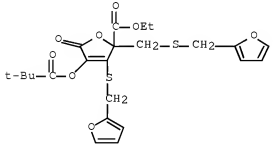
RN 577952-76-2 HCAPLUS
CN 2-Furancarboxamide, 3-(2-benzothiazolylthio)-2-[(2-benzothiazolylthio)methyl]-2,5-dihydro-4-hydroxy-N-(2-hydroxyethyl)-5-oxo- (CA INDEX NAME)



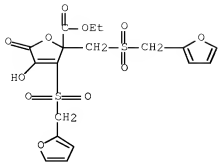
RN 577952-79-5 HCAPLUS
CN 2(5H)-Furanone, 4-[(2-furanylmethyl)thio]-5-[[(2-furanylmethyl)thio]methyl]-3-hydroxy-5-(hydroxymethyl)- (CA INDEX NAME)



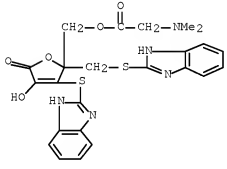
RN 577952-81-9 HCAPLUS
CN 2-Furancarboxylic acid, 4-(2,2-dimethyl-1-oxopropoxy)-3-[(2-furanylmethyl)thio]-2-[[(2-furanylmethyl)thio]methyl]-2,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



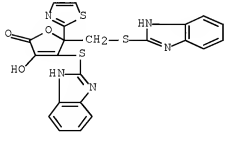
RN 577952-82-0 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(2-furanylmethyl)sulfonyl]-2-[[(2-furanylmethyl)sulfonyl]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



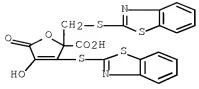
RN 577952-83-1 HCAPLUS
CN Glycine, N,N-dimethyl-, [3-(1H-benzimidazol-2-ylthio)-2-[(1H-benzimidazol-2-ylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-2-furanyl]methyl ester (CA INDEX NAME)



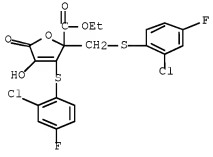
RN 577952-85-3 HCAPLUS
CN 2(5H)-Furanone, 4-(1H-benzimidazol-2-ylthio)-5-[(1H-benzimidazol-2-ylthio)methyl]-3-hydroxy-5-(2-thiazolyl)- (CA INDEX NAME)



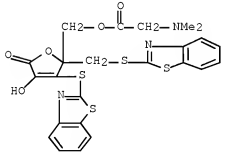
RN 577952-86-4 HCAPLUS
CN 2-Furancarboxylic acid, 3-(2-benzothiazolylthio)-2-[(2-benzothiazolylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo- (CA INDEX NAME)



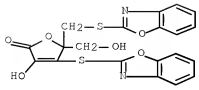
RN 577952-87-5 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(2-chloro-4-fluorophenyl)thio]-2-[[(2-chloro-4-fluorophenyl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



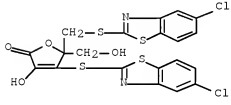
RN 577952-88-6 HCAPLUS
CN Glycine, N,N-dimethyl-, [3-(2-benzothiazolylthio)-2-[(2-benzothiazolylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-2-furanyl]methyl ester (CA INDEX NAME)



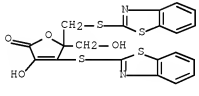
RN 577952-89-7 HCAPLUS
CN 2(5H)-Furanone, 4-(2-benzoxazolylthio)-5-[(2-benzoxazolylthio)methyl]-3-hydroxy-5-(hydroxymethyl)- (CA INDEX NAME)



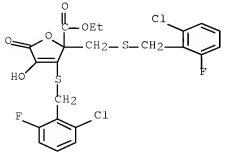
RN 577952-90-0 HCAPLUS
CN 2(5H)-Furanone, 4-[(5-chloro-2-benzothiazolyl)thio]-5-[[(5-chloro-2-benzothiazolyl)thio]methyl]-3-hydroxy-5-(hydroxymethyl)- (CA INDEX NAME)



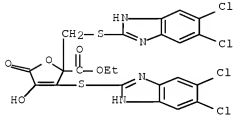
RN 577952-91-1 HCAPLUS
CN 2(5H)-Furanone, 4-(2-benzothiazolylthio)-5-[(2-benzothiazolylthio)methyl]-3-hydroxy-5-(hydroxymethyl)- (CA INDEX NAME)



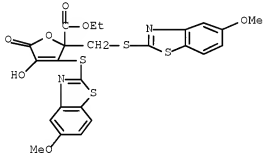
RN 577952-92-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[(2-chloro-6-fluorophenyl)methyl]thio]-2-[[[(2-chloro-6-fluorophenyl)methyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



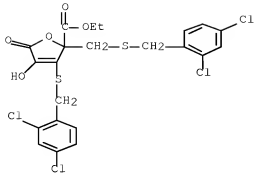
RN 577952-93-3 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(5,6-dichloro-1H-benzimidazol-2-yl)thio]-2-[[(5,6-dichloro-1H-benzimidazol-2-yl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



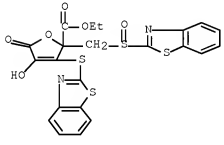
RN 577952-94-4 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(5-methoxy-2-benzothiazolyl)thio]-2-[[(5-methoxy-2-benzothiazolyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



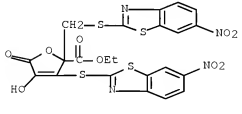
RN 577952-95-5 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[(2,4-dichlorophenyl)methyl]thio]-2-[[[(2,4-dichlorophenyl)methyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



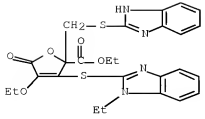
RN 577952-96-6 HCAPLUS
CN 2-Furancarboxylic acid, 2-[(2-benzothiazolylsulfinyl)methyl]-3-(2-benzothiazolylthio)-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



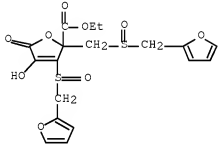
RN 577952-98-8 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(6-nitro-2-benzothiazolyl)thio]-2-[[(6-nitro-2-benzothiazolyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



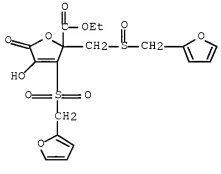
RN 577952-99-9 HCAPLUS
CN 2-Furancarboxylic acid, 2-[(1H-benzimidazol-2-ylthio)methyl]-4-ethoxy-3-[(1-ethyl-1H-benzimidazol-2-yl)thio]-2,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



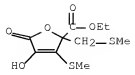
RN 577953-00-5 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(2-furanylmethyl)sulfinyl]-2-[[(2-furanylmethyl)sulfinyl]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



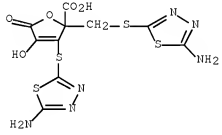
RN 577953-01-6 HCAPLUS
CN 2-Furancarboxylic acid, 2-[[(2-furanylmethyl)sulfinyl]methyl]-3-[(2-furanylmethyl)sulfonyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



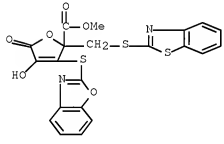
RN 577953-02-7 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-(methylthio)-2-[(methylthio)methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



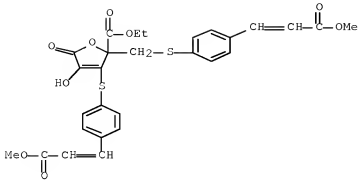
RN 577953-03-8 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(5-amino-1,3,4-thiadiazol-2-yl)thio]-2-[[(5-amino-1,3,4-thiadiazol-2-yl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo- (CA INDEX NAME)



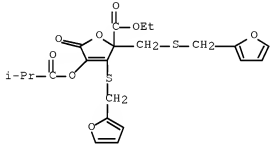
RN 577953-04-9 HCAPLUS
CN 2-Furancarboxylic acid, 2-[(2-benzothiazolylthio)methyl]-3-(2-benzoxazolylthio)-2,5-dihydro-4-hydroxy-5-oxo-, methyl ester (CA INDEX NAME)



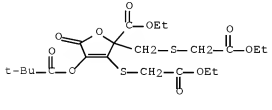
RN 577953-05-0 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[[4-(3-methoxy-3-oxo-1-propen-1-yl)phenyl]thio]-2-[[[4-(3-methoxy-3-oxo-1-propen-1-yl)phenyl]thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



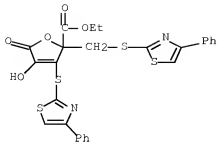
RN 577953-07-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(2-furanylmethyl)thio]-2-[[(2-furanylmethyl)thio]methyl]-2,5-dihydro-4-(2-methyl-1-oxopropoxy)-5-oxo-, ethyl ester (CA INDEX NAME)



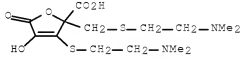
RN 577953-08-3 HCAPLUS
CN 2-Furancarboxylic acid, 4-(2,2-dimethyl-1-oxopropoxy)-3-[(2-ethoxy-2-oxoethyl)thio]-2-[[(2-ethoxy-2-oxoethyl)thio]methyl]-2,5-dihydro-5-oxo-, ethyl ester (CA INDEX NAME)



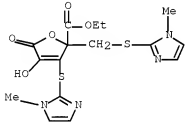
RN 577953-09-4 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(4-phenyl-2-thiazolyl)thio]-2-[[(4-phenyl-2-thiazolyl)thio]methyl]-, ethyl ester (CA INDEX NAME)



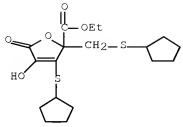
RN 577953-10-7 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[2-(dimethylamino)ethyl]thio]-2-[[[2-(dimethylamino)ethyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo- (CA INDEX NAME)



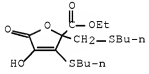
RN 577953-11-8 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(1-methyl-1H-imidazol-2-yl)thio]-2-[[(1-methyl-1H-imidazol-2-yl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



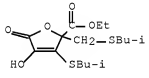
RN 577953-12-9 HCAPLUS
CN 2-Furancarboxylic acid, 3-(cyclopentylthio)-2-[(cyclopentylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



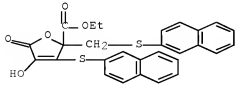
RN 577953-13-0 HCAPLUS
CN 2-Furancarboxylic acid, 3-(butylthio)-2-[(butylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577953-14-1 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(2-methylpropyl)thio]-2-[[(2-methylpropyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)

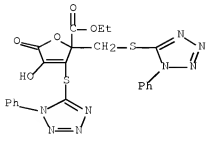


RN 577953-15-2 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-(2-naphthalenylthio)-2-[(2-naphthalenylthio)methyl]-5-oxo-, ethyl ester (CA INDEX NAME)

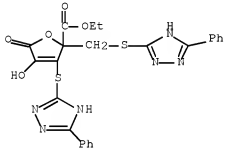


RN 577953-16-3 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(1-phenyl-1H-tetrazol-5-yl)thio]-2-[[(1-phenyl-1H-tetrazol-5-yl)thio]methyl]-, ethyl

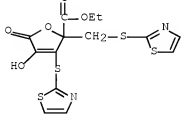
ester (CA INDEX NAME)



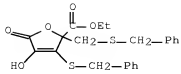
RN 577953-17-4 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(3-phenyl-1H-1,2,4-triazol-5-yl)thio]-2-[[(3-phenyl-1H-1,2,4-triazol-5-yl)thio]methyl]-, ethyl ester (CA INDEX NAME)



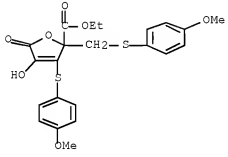
RN 577953-18-5 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-(2-thiazolylthio)-2-[(2-thiazolylthio)methyl]-, ethyl ester (CA INDEX NAME)



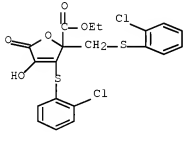
RN 577953-19-6 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(phenylmethyl)thio]-2-[[(phenylmethyl)thio]methyl]-, ethyl ester (CA INDEX NAME)



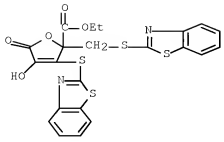
RN 577953-20-9 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(4-methoxyphenyl)thio]-2-[[(4-methoxyphenyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



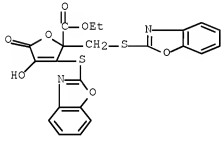
RN 577953-21-0 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(2-chlorophenyl)thio]-2-[[(2-chlorophenyl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



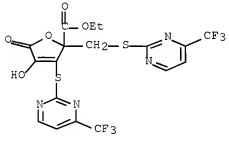
RN 577953-22-1 HCAPLUS
CN 2-Furancarboxylic acid, 3-(2-benzothiazolylthio)-2-[(2-benzothiazolylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



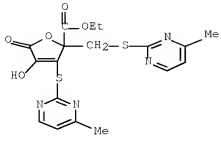
RN 577953-23-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-(2-benzoxazolylthio)-2-[(2-benzoxazolylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



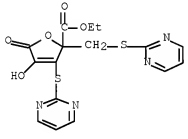
RN 577953-24-3 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[[4-(trifluoromethyl)-2-pyrimidinyl]thio]-2-[[[4-(trifluoromethyl)-2-pyrimidinyl]thio]methyl]-, ethyl ester (CA INDEX NAME)



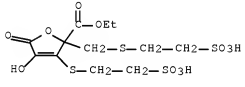
RN 577953-25-4 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(4-methyl-2-pyrimidinyl)thio]-2-[[(4-methyl-2-pyrimidinyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



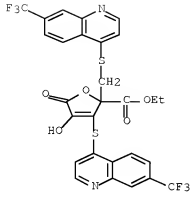
RN 577953-26-5 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-(2-pyrimidinylthio)-2-[(2-pyrimidinylthio)methyl]-, ethyl ester (CA INDEX NAME)



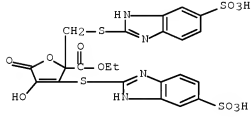
RN 577953-27-6 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(2-sulfoethyl)thio]-2-[[(2-sulfoethyl)thio]methyl]-, 2-ethyl ester (CA INDEX NAME)



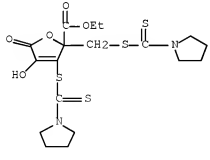
RN 577953-28-7 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[[7-(trifluoromethyl)-4-quinolinyl]thio]-2-[[[7-(trifluoromethyl)-4-quinolinyl]thio]methyl]-, ethyl ester (CA INDEX NAME)



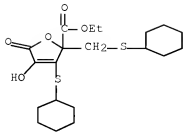
RN 577953-29-8 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(6-sulfo-1H-benzimidazol-2-yl)thio]-2-[[(6-sulfo-1H-benzimidazol-2-yl)thio]methyl]-, 2-ethyl ester (CA INDEX NAME)



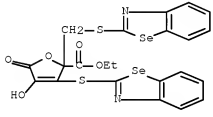
RN 577953-30-1 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-[(1-pyrrolidinylthioxomethyl)thio]-2-[[(1-pyrrolidinylthioxomethyl)thio]methyl]-, ethyl ester (CA INDEX NAME)



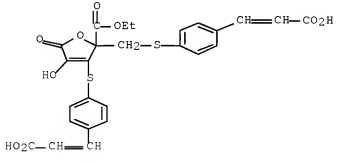
RN 577953-31-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-(cyclohexylthio)-2-[(cyclohexylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



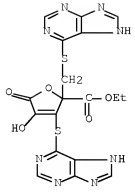
RN 577953-38-9 HCAPLUS
CN 2-Furancarboxylic acid, 3-(2-benzoselenazolylthio)-2-[(2-benzoselenazolylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (9CI) (CA INDEX NAME)



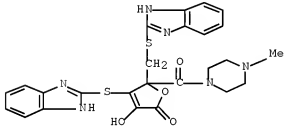
RN 577953-40-3 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[4-(2-carboxyethenyl)phenyl]thio]-2-[[[4-(2-carboxyethenyl)phenyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, 2-ethyl ester (CA INDEX NAME)



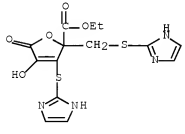
RN 577953-41-4 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-5-oxo-3-(9H-purin-6-ylthio)-2-[(9H-purin-6-ylthio)methyl]-, ethyl ester (CA INDEX NAME)



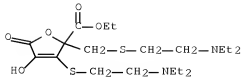
RN 577953-42-5 HCAPLUS
CN 2(5H)-Furanone, 4-(1H-benzimidazol-2-ylthio)-5-[(1H-benzimidazol-2-ylthio)methyl]-3-hydroxy-5-[(4-methyl-1-piperazinyl)carbonyl]- (CA INDEX NAME)



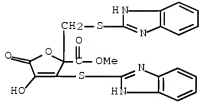
RN 577953-43-6 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-(1H-imidazol-2-ylthio)-2-[(1H-imidazol-2-ylthio)methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



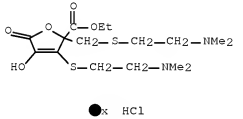
RN 577953-44-7 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[2-(diethylamino)ethyl]thio]-2-[[[2-(diethylamino)ethyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



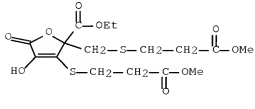
RN 577953-45-8 HCAPLUS
CN 2-Furancarboxylic acid, 3-(1H-benzimidazol-2-ylthio)-2-[(1H-benzimidazol-2-ylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, methyl ester (CA INDEX NAME)



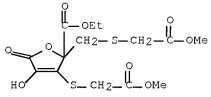
RN 577953-46-9 HCAPLUS
CN 2-Furancarboxylic acid, 3-[[2-(dimethylamino)ethyl]thio]-2-[[[2-(dimethylamino)ethyl]thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester, hydrochloride (1:?) (CA INDEX NAME)



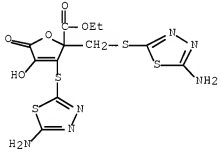
RN 577953-47-0 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(3-methoxy-3-oxopropyl)thio]-2-[[(3-methoxy-3-oxopropyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



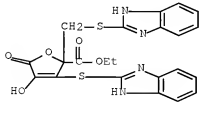
RN 577953-48-1 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(2-methoxy-2-oxoethyl)thio]-2-[[(2-methoxy-2-oxoethyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



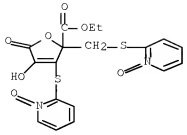
RN 577953-49-2 HCAPLUS
CN 2-Furancarboxylic acid, 3-[(5-amino-1,3,4-thiadiazol-2-yl)thio]-2-[[(5-amino-1,3,4-thiadiazol-2-yl)thio]methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



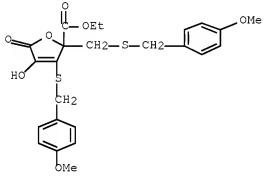
RN 577953-50-5 HCAPLUS
CN 2-Furancarboxylic acid, 3-(1H-benzimidazol-2-ylthio)-2-[(1H-benzimidazol-2-ylthio)methyl]-2,5-dihydro-4-hydroxy-5-oxo-, ethyl ester (CA INDEX NAME)



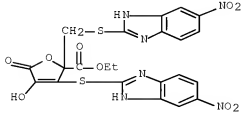
RN 577953-52-7 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(1-oxido-2-pyridinyl)thio]-2-[[(1-oxido-2-pyridinyl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577953-53-8 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[[(4-methoxyphenyl)methyl]thio]-2-[[[(4-methoxyphenyl)methyl]thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



RN 577953-54-9 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-3-[(6-nitro-1H-benzimidazol-2-yl)thio]-2-[[(6-nitro-1H-benzimidazol-2-yl)thio]methyl]-5-oxo-, ethyl ester (CA INDEX NAME)



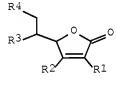
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

L50 ANSWER 2 OF 58 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:976808 HCAPLUS Full-text
DOCUMENT NUMBER: 151:228885
TITLE: UVB filter based on ascorbic acid derivatives and their use in cosmetic hair and skin compositions
INVENTOR(S): Rudolph, Thomas; Buehle, Philipp
PATENT ASSIGNEE(S): Merck Patent GmbH, Germany
SOURCE: PCT Int. Appl., 95pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009097953	A1	20090813	WO 2009-EP211	20090115

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: EP 2008-2167 A 20080206
ED Entered STN: 14 Aug 2009
GI



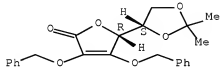
I

AB The invention relates to compds. of formula (I), wherein R1, R2, R3, R4 have the meaning cited in the claims, to methods for the production thereof, agents containing said compds. and to their use for the functionalization of matrixes, in particular their use as skin and/or hair-binding UV filters. Thus 4-dihexylaminobenzoic acid-6-O ascorbate was prepared from Vitamin C and 4-dihexylamino benzoic acid. The product was included in a cosmetic W/O emulsion as a 1 weight% component; other ingredients were (weight%): Abil EM 90 3.00; Isolan GI 34 1.50; Pelemol BIP 5.00; Arlasolve DMI 5.00; mineral oil 8.00; Tegosoft OS 5.00; Gilugel SIL 5 5.00; preservative 1.00; sodium chloride 0.50; EDTA 0.1; water to 100.

IT 2871-84-3P
RL: PRPH (Prophetic); RCT (Reactant); SPN (Synthetic preparation); PREP

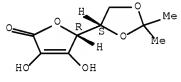
(Preparation); RACT (Reactant or reagent)
(UVB filter based on ascorbic acid derivs. and their use in cosmetic hair and skin compns.)
RN 2871-84-3 HCAPLUS
CN L-Ascorbic acid, 5,6-O-(1-methylethylidene)-2,3-bis-O-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.



IT 15042-01-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(UVB filter based on ascorbic acid derivs. and their use in cosmetic hair and skin compns.)
RN 15042-01-0 HCAPLUS
CN L-Ascorbic acid, 5,6-O-(1-methylethylidene)- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 3 OF 58 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2009:977200 HCAPLUS Full-text
DOCUMENT NUMBER: 151:228887
TITLE: UVA filter based on ascorbic acid derivatives and their use in cosmetic hair and skin compositions
INVENTOR(S): Rudolph, Thomas; Buehle, Philipp
PATENT ASSIGNEE(S): Merck Patent GmbH, Germany
SOURCE: PCT Int. Appl., 98pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009097951	A1	20090813	WO 2009-EP183	20090114
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,				

KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI,
SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: EP 2008-2176 A 20080206

ED Entered STN: 14 Aug 2009

AB The invention relates to compds. of formula wherein R1, R2, R3, R4 have the meaning cited in the claims, to methods for the production thereof, to agents containing said compds. and to their use for the functionalization of matrixes, in particular their use as skin and/or hair-binding UV filters. Thus 2-(4-dihexylamino-2-hydroxybenzoyl)-benzoic acid ascorbyl ester was prepared from Vitamin C and 2-(4-dihexylamino-2-hydroxybenzoyl)-benzoic acid. The product was included in a cosmetic W/O emulsion as a 1 weight% component; other ingredients were (weight%): Abil EM 90 3.00; Isolan GI 34 1.50; Pelemol BIP 5.00; Arlasolve DMI 5.00; mineral oil 8.00; Tegosoft OS 5.00; Gilugel SIL 5 5.00; preservative 1.00; sodium chloride 0.50; EDTA 0.1; water to 100.

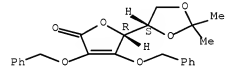
IT 2871-84-3P

RL: PRPH (Prophetic); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(UVA filter based on ascorbic acid derivs. and their use in cosmetic hair and skin compns.)

RN 2871-84-3 HCAPLUS

CN L-Ascorbic acid, 5,6-O-(1-methylethylidene)-2,3-bis-O-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.



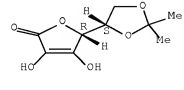
IT 15042-01-0

RL: RCT (Reactant); RACT (Reactant or reagent)
(UVA filter based on ascorbic acid derivs. and their use in cosmetic hair and skin compns.)

RN 15042-01-0 HCAPLUS

CN L-Ascorbic acid, 5,6-O-(1-methylethylidene)- (CA INDEX NAME)

Absolute stereochemistry.



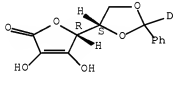
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 4 OF 58 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:769872 HCAPLUS Full-text
DOCUMENT NUMBER: 148:387155
TITLE: Novel dosage form
INVENTOR(S): Nadkarni, Sunil Sadanand; Vaya, Navin; Karan, Rajesh Singh; Gupta, Vinod Kumar
PATENT ASSIGNEE(S): Torrent Pharmaceuticals Limited, India
SOURCE: Indian Pat. Appl., 96pp.
CODEN: INXXBQ
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2005MU01013	A	20070629	IN 2005-MU1013	20050826
PRIORITY APPLN. INFO.:			IN 2005-MU1013	20050826

ED Entered STN: 17 Jul 2007
AB A dosage form comprising of a high-dose, high-solubility active ingredient for modified release and a low-dose active ingredient for immediate release wherein the weight ratio of immediate-release active ingredient and modified-release active ingredient is from 1:10 to 1:15000 and the weight of modified-release active ingredient per unit is from 500 mg to 1500 mg. A process for preparing the dosage form is provided.
IT 122431-96-3
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel dosage form containing modified-release and immediate-release active ingredients)
RN 122431-96-3 HCAPLUS
CN L-Ascorbic acid, 5,6-O-(phenylmethylene-d)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L50 ANSWER 5 OF 58 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:1016569 HCAPLUS Full-text
DOCUMENT NUMBER: 148:503081
TITLE: Novel drug delivery system
INVENTOR(S): Nadkarni, Sunil Sadanand; Vaya, Navin; Karan, Rajesh Singh; Gupta, Vinod Kumar
PATENT ASSIGNEE(S): Torrent Pharmaceuticals Limited, India
SOURCE: Indian Pat. Appl., 80pp., Addn. of Indian Appl. No. 2004MU198.
CODEN: INXXBQ
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2005MU01012	A	20070831	IN 2005-MU1012	20050826
PRIORITY APPLN. INFO.:			IN 2004-MU198 A0	20040220

ED Entered STN: 12 Sep 2007

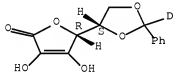
AB A novel modified release dosage form comprising of a high solubility active ingredient, which utilizes dual retard technique to effectively reduce the quantity of release controlling agents. Present invention can optionally comprise addnl. another active ingredient as an immediate release form or modified release form. Present invention also relates to a process for preparing the said formulation.

IT 122431-96-3, Zilascorb
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel drug delivery system)

RN 122431-96-3 HCAPLUS

CN L-Ascorbic acid, 5,6-O-(phenylmethylene-d)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L50 ANSWER 6 OF 58 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:100738 HCAPLUS Full-text

DOCUMENT NUMBER: 144:198849

TITLE: Novel dosage form comprising modified-release and immediate-release active ingredients

INVENTOR(S): Vaya, Navin; Karan, Rajesh Singh; Sadanand, Sunil; Gupta, Vinod Kumar

PATENT ASSIGNEE(S): India

SOURCE: U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S. Ser. No. 630,446.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060024365	A1	20060202	US 2005-134633	20050519
IN 2002MU00697	A	20040529	IN 2002-MU697	20020805
IN 193042	A1	20040626		
IN 2002MU00699	A	20040529	IN 2002-MU699	20020805
IN 2003MU00080	A	20050204	IN 2003-MU80	20030122
IN 2003MU00082	A	20050204	IN 2003-MU82	20030122
US 20040096499	A1	20040520	US 2003-630446	20030729
PRIORITY APPLN. INFO.:			IN 2002-MU697 A	20020805
			IN 2002-MU699 A	20020805
			IN 2003-MU80 A	20030122
			IN 2003-MU82 A	20030122

US 2003-630446 A2 20030729

ED Entered STN: 03 Feb 2006

AB A dosage form comprising of a high dose, high solubility active ingredient as modified release and a low dose active ingredient as immediate release where the weight ratio of immediate release active ingredient and modified release active ingredient is from 1:10 to 1:15000 and the weight of modified release active ingredient per unit is from 500 mg to 1500 mg; a process for preparing the dosage form. Tablets containing 10 mg sodium pravastatin and 1000 mg niacin were prepared The release of sodium pravastatin after 24 h was 67.7%, and the release of niacin after 1 h was 84.1%.

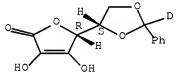
IT 122431-96-3

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel dosage form comprising modified-release and immediate-release active ingredients)

RN 122431-96-3 HCAPLUS

CN L-Ascorbic acid, 5,6-O-(phenylmethylene-d)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L50 ANSWER 7 OF 58 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:376629 HCAPLUS Full-text

DOCUMENT NUMBER: 138:362659

TITLE: Enhancement of taxane-based chemotherapy by a CDK1 antagonist

INVENTOR(S): Altieri, Dario C.; O'Connor, Daniel S.

PATENT ASSIGNEE(S): Yale University, USA

SOURCE: PCT Int. Appl., 84 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

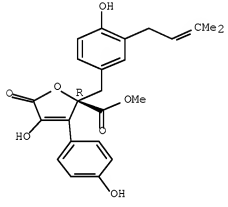
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003039536	A1	20030515	WO 2002-US34871	20021031
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002359336	A1	20030519	AU 2002-359336	20021031
US 20030125374	A1	20030703	US 2002-284490	20021031

US 6949558 B2 20050927
PRIORITY APPLN. INFO.: US 2001-331054P P 20011107
US 2002-394252P P 20020709
WO 2002-US34871 W 20021031

ED Entered STN: 16 May 2003
AB The invention provides a combination therapy for inhibiting the growth of tumor, for treating cancer, and for inducing cell death. The therapy comprises the sequential administration of a taxane and a CDK1 antagonist. The invention also provides pharmaceutical compns. comprising a taxane and a CDK1 antagonist and kits comprising a taxane and CDK1 antagonist.
IT 87414-49-1, Butyrolactone I
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CDK1 antagonist enhancement of taxane-based chemotherapy)
RN 87414-49-1 HCAPLUS
CN 2-Furancarboxylic acid, 2,5-dihydro-4-hydroxy-2-[[4-hydroxy-3-(3-methyl-2-buten-1-yl)phenyl]methyl]-3-(4-hydroxyphenyl)-5-oxo-, methyl ester, (2R)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

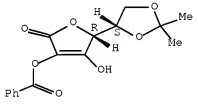
L50 ANSWER 8 OF 58 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2001:760035 HCAPLUS Full-text
DOCUMENT NUMBER: 135:308595
TITLE: Use of ascorbic acid derivatives for increasing epidermal ceramides synthesis
INVENTOR(S): Castiel, Isabelle; Ferraris, Corinne
PATENT ASSIGNEE(S): L'Oreal, Fr.
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

EP 1145710	A1	20011017	EP 2001-400781		20010327
EP 1145710	B1	20061102			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR					
FR 2807320	A1	20011012	FR 2000-4574		20000410
FR 2807320	B1	20020524			
AT 344016	T	20061115	AT 2001-400781		20010327
ES 2273789	T3	20070516	ES 2001-400781		20010327
JP 2001316261	A	20011113	JP 2001-112027		20010410
US 20020042380	A1	20020411	US 2001-828884		20010410
US 20030176366	A1	20030918	US 2003-340839		20030113
JP 2006070048	A	20060316	JP 2005-343815		20051129
PRIORITY APPLN. INFO.:			FR 2000-4574	A	20000410
			JP 2001-112027	A3	20010410
			US 2001-828884	B1	20010410

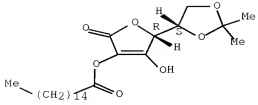
OTHER SOURCE(S): MARPAT 135:308595
ED Entered STN: 19 Oct 2001
AB Cosmetics compns. comprising ascorbic acid or its derivs. are used for enhancing the synthesis of epidermal ceramides and improving the skin barrier function. Efficacy of 5 μg/mL vitamin C in the enhancement of epidermal ceramide synthesis is shown. A cosmetic composition contained octyldodecanol 0.2, cyclomethicone 5, dimethicone copolyol 5, tocopheryl acetate 1, UV sunscreens 1, ascorbyl glucoside 0.01, glycerin 3, disodium EDTA 0.1, pH adjusting agents 2.6, preservatives 0.4, gelling agents 1.2, and water q.s. 100%.
IT 29881-30-9 34371-16-9 171267-22-4
366791-06-2 366791-07-3
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(use of ascorbic acid derivs. for increasing epidermal ceramides synthesis)
RN 29881-30-9 HCAPLUS
CN L-Ascorbic acid, 5,6-O-(1-methylethylidene)-, 2-benzoate (CA INDEX NAME)

Absolute stereochemistry.



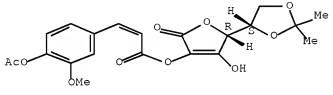
RN 34371-16-9 HCAPLUS
CN L-Ascorbic acid, 5,6-O-(1-methylethylidene)-, 2-hexadecanoate (CA INDEX NAME)

Absolute stereochemistry.



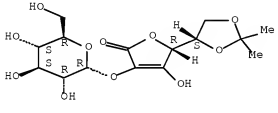
RN 171267-22-4 HCAPLUS
CN L-Ascorbic acid, 5,6-O-(1-methylethylidene)-,
2-[3-[4-(acetyloxy)-3-methoxyphenyl]-2-propenoate] (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.



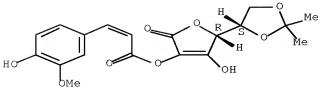
RN 366791-06-2 HCAPLUS
CN L-Ascorbic acid, 2-O-α-D-glucopyranosyl-5,6-O-(1-methylethylidene)-
(CA INDEX NAME)

Absolute stereochemistry.



RN 366791-07-3 HCAPLUS
CN L-Ascorbic acid, 5,6-O-(1-methylethylidene)-,
2-[3-(4-hydroxy-3-methoxyphenyl)-2-propenoate] (CA INDEX NAME)

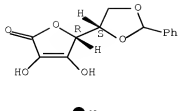
Absolute stereochemistry.
Double bond geometry unknown.



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 9 OF 58 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1997:294041 HCAPLUS Full-text
DOCUMENT NUMBER: 126:338294
ORIGINAL REFERENCE NO.: 126:65603a,65606a
TITLE: Antioxidative activity of SBA and its effect on UV-induced damages
AUTHOR(S): Kojima, Shuji
CORPORATE SOURCE: Res. Inst. Biol. Sci., Sci. Univ. Tokyo, Noda, 278, Japan
SOURCE: Fragrance Journal (1997), 25(4), 56-62
CODEN: FUJAD7; ISSN: 0288-9803
PUBLISHER: Fureguransu Janaru Sha
DOCUMENT TYPE: Journal; General Review
LANGUAGE: Japanese
ED Entered STN: 08 May 1997
AB A review with 14 refs. Sodium 5,6-benzylidene ascorbate (SBA) is a conjugate of ascorbic acid (Asc) with benzaldehyde (BA). The antioxidative activity of SBA and its effect on UV-induced damages were investigated. It has been found that the antioxidative activity of SBA is more stable in the in vitro assay using autoxidn. of rat brain homogenates and has a long life-time in living cells. In the study on the effect of SBA on UV-A-induced damages including a delayed type of erythema and melanin pigment on skin, SBA was effective in protecting to the delayed type of erythema on guinea pig skin caused by UV-B irradiation exposure. In addition, the elevated melanin content induced by UV-A was remarkably inhibited via blocking of stimulation of tyrosinase. These results suggest that SBA protects abnormalities caused by UV irradiation and would be applicable as a therapeutic drug in hyperpigmentation.
IT 98734-55-5, Sodium 5,6-benzylidene ascorbate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antioxidative activity of sodium benzylidene ascorbate and its effect on UV-induced damages)
RN 98734-55-5 HCAPLUS
CN L-Ascorbic acid, 5,6-O-(phenylmethylene)-, monosodium salt (9CI) (CA INDEX NAME)

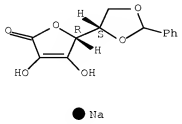
Absolute stereochemistry.



L50 ANSWER 10 OF 58 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:835423 HCAPLUS Full-text
DOCUMENT NUMBER: 123:279867
ORIGINAL REFERENCE NO.: 123:49991a,49994a
TITLE: Inhibitory effect of sodium 5,6-benzylidene ascorbate (SBA) on the elevation of melanin biosynthesis induced by ultraviolet-A (UV-A) light in cultured B-16 melanoma cells
AUTHOR(S): Kojima, Shuji; Yamaguchi, Hideo; Morita, Kimiko; Ueno, Yoshio
CORPORATE SOURCE: Research Inst. Biosciences, Science Univ. Tokyo, Chiba, 278, Japan
SOURCE: Biological & Pharmaceutical Bulletin (1995), 18(8), 1076-80
CODEN: BPBLEO; ISSN: 0918-6158
PUBLISHER: Pharmaceutical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
ED Entered STN: 05 Oct 1995
AB Sodium 5,6-benzylidene ascorbate (SBA) is a conjugate of ascorbic acid (Asc) with benzaldehyde. It has been found that the antioxidant activity of SBA is more stable and has a longer lifetime in living cells and organs than Asc. In this study, the authors investigated the effect of SBA on the induction of melanin in cultured melanoma (B-16) cells irradiated by UV-A. Melanin content of B-16 cells was significantly increased by UV-A irradiation The induction was abolished by mannitol and particularly by superoxide dismutase, suggesting the involvement of O2- in the biosynthesis of melanin in cultured melanoma cells. This was theorized by the fact that the induction was also observed in B-16 cells treated with superoxide anion radicals chemical generated in the hypoxanthine/xanthine oxidase-reaction system, instead of UV-A irradiation The induction of melanin caused by UV-A irradiation was suppressed by SBA in a dose-dependent manner. To elucidate the mechanism of this suppressive effect, the scavenging activity against O2-, and the inhibitory effect of SBA on tyrosinase activity were examined ESR spectrometric anal. showed that SBA strongly scavenged O2-, and the presence of SBA in the medium remarkably inhibited the tyrosinase activity in cultured B-16 melanoma cells. It can be concluded that SBA effectively inhibits the melanin biosynthesis in B-16 melanoma cells induced by reactive oxygen species (ROS) generated by UV-A irradiation via tyrosinase.
IT 98734-55-5, Sodium 5,6-benzylideneascorbate
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(inhibitory effect of sodium 5,6-benzylidene ascorbate (SBA) on melanin biosynthesis induced by UV-A in melanoma cells in relation to antioxidant and anti-tyrosinase activity)
RN 98734-55-5 HCAPLUS

CN L-Ascorbic acid, 5,6-O-(phenylmethylene)-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

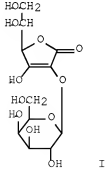


OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS)

L50 ANSWER 11 OF 58 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1995:274992 HCAPLUS Full-text
DOCUMENT NUMBER: 122:56401
ORIGINAL REFERENCE NO.: 122:10939a,10942a
TITLE: Preparation of 2-O-β-D-galactopyranosyl-L-ascorbic acid
INVENTOR(S): Shimono, Yumi; Hatsutori, Noriko; Donho, Munehiko
PATENT ASSIGNEE(S): Unitika Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06263790	A	19940920	JP 1993-78880	19930312
PRIORITY APPLN. INFO.:			JP 1993-78880	19930312

ED Entered STN: 05 Jan 1995
GI



I

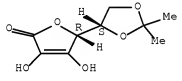
AB 2-O-β-D-galactopyranosyl-L-ascorbic acid (I) is prepared at low cost and in good yield. by reaction of 5,6-isopropylidene-L-ascorbic acid with β-galactosyl-containing compound in the presence of β-galactosidase. A food or beverage, a medicament for sensitive diseases, and a cosmetic contain I as the active ingredient. I exhibits excellent stability, in vivo shows sufficient activity for vitamin C, and is useful as a stabilizer, quality improver, antioxidant, physiol. active agent, and UV-absorbent. Thus, 1.25 g 5,6-O-isopropylidene-L-ascorbic acid and 30 g lactose were dissolved in 100 mL H2O and after adjusting the pH to 4.5, β-galactosidase derived from Aspergillus oryzae was added at 7.5 mg/Ml. The resulting mixture was allowed to react at 40° for 60 min followed by boiling the mixture for 5 min for deactivating the enzyme and purification a column of activated charcoal to give 2.08 mg I. A soft drink containing grape fruit juice and I 0.1% was stored at 40° for 120 days and the residual ratio of I was 97.3% vs. 70.5, and 30.1% for 6-O-stearyl-L-ascorbic acid and L-ascorbic acid, resp. A diet containing I showed same activity as that of vitamin C for increasing body weight of vitamin C-deficient rats. Chewing gum, tooth paste, troche, mouth wash, and cream containing I were prepared

IT 15042-01-0
RL: CAT (Catalyst use); USES (Uses)
(transglycosidation with lactose in preparation of O-β-D-galactopyranosyl-L-ascorbic acid)

RN 15042-01-0 HCAPLUS

CN L-Ascorbic acid, 5,6-O-(1-methylethylidene)- (CA INDEX NAME)

Absolute stereochemistry.



L50 ANSWER 12 OF 58 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1992:543447 HCAPLUS Full-text

DOCUMENT NUMBER: 117:143447

ORIGINAL REFERENCE NO.: 117:24665a,24668a

TITLE: Aromatic aldehydes and derivatives thereof useful for the treatment of skin diseases and arthritis

INVENTOR(S): Boerretzen, Bernt; Pettersen, Erik Olai; Larsen, Rolf Olav; Dornish, John Michael; Ramdahl, Thomas; Oftebro, Reidar

PATENT ASSIGNEE(S): Norsk Hydro A/S, Norway

SOURCE: PCT Int. Appl., 18 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9209276	A1	19920611	WO 1991-NO147	19911125

W: AU, BG, BR, CA, FI, HU, JP, KP, KR, LK, MW, NO, PL, RO, SD, SU, US

RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG

CA 2095334	A1	19920531	CA 1991-2095334		19911125
AU 9190356	A	19920625	AU 1991-90356		19911125
EP 559728	A1	19930915	EP 1992-900278		19911125
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE					
JP 06503084	T	19940407	JP 1992-500554		19911125
PRIORITY APPLN. INFO.:			GB 1990-26080	A	19901130
			WO 1991-NO147	A	19911125

OTHER SOURCE(S): MARPAT 117:143447

ED Entered STN: 17 Oct 1992

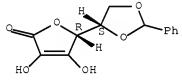
AB Aldehydes ArCX1X2Y [Y = H, D; X1, X2 = H, C1-5 alkyl, CX1X2 = CO, cyclic acetal group, thioacetal group, etc.; Ar = (un)substituted Ph] and pharmaceutically acceptable salts thereof are used for the manufacture of a medicament for the treatment of diseases arising from an abnormally elevated cell proliferation. Thus, reversible protein synthesis inhibitory effects of 16 compds., e.g. zilascorb(2H), on human NHIK 3025 cells were demonstrated.

IT 98734-55-5 122431-96-3 143458-95-1
143458-96-2 143459-00-1
RL: BIOL (Biological study)
(skin diseases and arthritis treatment with)

RN 98734-55-5 HCAPLUS

CN L-Ascorbic acid, 5,6-O-(phenylmethylene)-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

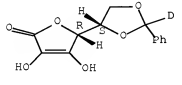


● Na

RN 122431-96-3 HCAPLUS

CN L-Ascorbic acid, 5,6-O-(phenylmethylene-d)- (9CI) (CA INDEX NAME)

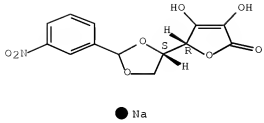
Absolute stereochemistry.



RN 143458-95-1 HCAPLUS

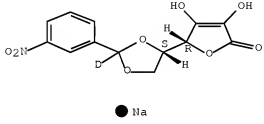
CN L-Ascorbic acid, 5,6-O-[(3-nitrophenyl)methylene]-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



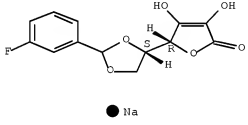
RN 143458-96-2 HCAPLUS
CN L-Ascorbic acid, 5,6-O-[(3-nitrophenyl)methylene-d]-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 143459-00-1 HCAPLUS
CN L-Ascorbic acid, 5,6-O-[(3-fluorophenyl)methylene]-, monosodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 13 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2004-303321 [28] WPIX

CROSS REFERENCE: 2004-212686; 2004-293757; 2004-304027; 2004-707329
DOC. NO. CPI: C2004-115370 [28]
TITLE: Prevention/treatment of cutaneous sign of intrinsic aging involves applying, to a skin/mucous membrane, a composition comprising oxidation-sensitive hydrophilic active principle and maleic anhydride copolymer
DERWENT CLASS: A13; A14; A96; B05; C03; D21; E11; E13
INVENTOR: BIATRY B
PATENT ASSIGNEE: (OREA-C) L'OREAL SA
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
US 20040042990	A1 20040304	(200428)*	EN	10[0]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20040042990	A1 Provisional	US 2002-394255P	20020709
US 20040042990	A1	US 2003-464553	20030619

PRIORITY APPLN. INFO: FR 2002-7638 20020620

AB US 20040042990 A1 UPAB: 20050528

NOVELTY - Prevention/treatment of cutaneous sign of intrinsic aging involves applying to a skin/mucous membrane, a composition (C1) comprising oxidation-sensitive hydrophilic active principle (a) and maleic anhydride copolymer (b) containing maleic anhydride comonomer unit and comonomer unit, in an aqueous phase.

DETAILED DESCRIPTION - Prevention/treatment of cutaneous sign of intrinsic aging involves applying to a skin/mucous membrane, a composition (C1) comprising oxidation-sensitive hydrophilic active principle (a) selected from ascorbic acid or its compound, and maleic anhydride copolymer (b) containing maleic anhydride comonomer unit and comonomer unit selected from vinyl acetate, vinyl alcohol, vinylpyrrolidone, 2-20C olefin and styrene, in an aqueous phase.

ACTIVITY - Dermatological.

A reconstructed skin was prepared using normal adult human dermal fibroblasts in a proportion of 106 cells per equivalent dermis. The inoculation of the keratinocytes was carried out in a proportion of 50000 cells per ring with a diameter of 1.5 cm. The duration of immersion phase (ip) was 7 days and the duration of emergence phase (ep) was 7 days. The final change in medium of ip was carried out in the presence of the combination (A) of ascorbic acid and of the styrene/maleic anhydride copolymer in the form of a 40% sodium salt in water. The culture was mounted on a grid for ep, during this phase all changes in medium were carried out in the presence of (A). The reconstructed skins were analyzed at the end of ep. A control sample was systemically prepared and analyzed in parallel.

On observing with microscope, it was found that the intensity and the thickness of the fluorescence region corresponding to the dermoepidermal junction was much greater in the sample to which (A) was added. An increase in the fibroblasts in the lattice with a more perpendicular arrangement of the basal keratinocytes at the dermoepidermal junction was also noticed.

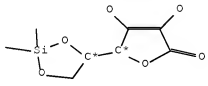
MECHANISM OF ACTION - None given.

USE - Composition (C1) is useful for preventing and treating cutaneous sign of intrinsic aging (claimed).

ADVANTAGE - Composition (C1) exhibits good cosmetic properties both with regard to touch and tolerance. The preservation of (C1) over time does

not require specific precautions and retains the activity of the active principle. The hydrophilic active principle e.g. ascorbic acid, which is unstable in an oxidizing medium is stabilized; is comfortable on application; does not lead to any skin irritation after application; and is compatible with the constraints of an industrial implementation of its manufacturing process.

AN.S DCR-874937
CN.S 5-(2,2-Dimethyl-[1,3,2]dioxasilolan-4-yl)-3,4-dihydroxy-5H-furan-2-one
SDCN RADPEJ



L50 ANSWER 14 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-393475 [37] WPIX
DOC. NO. CPI: C2003-104583 [37]
TITLE: Malignant cell differentiation inducer composition, useful for treatment of cancer, e.g. brain, uterine, stomach, breast, lung, thyroid, or testicular or acute leukemia, comprises monosodium 5,6-benzylidene-L-ascorbate
DERWENT CLASS: B03
INVENTOR: KOCHI M
PATENT ASSIGNEE: (KOCH-I) KOCHI M
COUNTRY COUNT: 27

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2003032979	A1	20030424	(200337)*	JA	22[3]	
JP 2003119136	A	20030423	(200340)	JA	7	
EP 1435236	A1	20040707	(200444)	EN		
US 20040254123	A1	20041216	(200482)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003032979	A1	WO 2002-JP10413	20021007
JP 2003119136	A	JP 2001-312788	20011010
EP 1435236	A1	EP 2002-801495	20021007
EP 1435236	A1	WO 2002-JP10413	20021007
US 20040254123	A1	WO 2002-JP10413	20021007
US 20040254123	A1	US 2004-491790	20040406

FILING DETAILS:

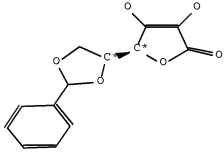
PATENT NO	KIND		PATENT NO
EP 1435236	A1	Based on	WO 2003032979 A

PRIORITY APPLN. INFO: JP 2001-312788 20011010
AB WO 2003032979 A1 UPAB: 20050530
NOVELTY - Malignant cell differentiation inducer composition comprises monosodium 5,6-benzylidene-L-ascorbate (SBA) and a carrier.
DETAILED DESCRIPTION - Malignant cell differentiation inducer composition comprises monosodium 5,6-benzylidene-L-ascorbate (SBA) of formula (I) and a carrier.
ACTIVITY - Cytostatic.
In cytotoxity assays SBA had a CD50 value for rat glioma C6 cells of 250 mug/ml.
MECHANISM OF ACTION - Differentiation-Inducer.
USE - Malignant cell differentiation inducer is used for treating cancer including brain, uterine, stomach, breast, lung, thyroid, or testicular cancer or acute leukemia.
ADVANTAGE - The inducer has good activity with extremely low toxicity.
AN.S DCR-88700
CN.P 5,6-BENZYLIDENE-ASCORBATE
CN.S 4-hydroxy-5-oxo-2-(2-phenyl-[1,3]dioxolan-4-yl)-2,5-dihydro-furan-3-olate; Sodium
SDCN RA5DDU

CM 1

Na

CM 2



L50 ANSWER 15 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-354576 [33] WPIX
DOC. NO. CPI: C2003-093477 [33]
TITLE: New succinic diesters in which the two esterifying groups have dermatological activity, for percutaneous application
DERWENT CLASS: B05; D21; E13; E15
INVENTOR: BORDAT P; PERIE J; PERIE J J; REDOULES D
PATENT ASSIGNEE: (BORD-I) BORDAT P; (FABR-C) FABRE DERMO-COSMETIQUE PIERRE; (FABR-C) FABRE DERMOCOSMETIQUE PIERRE; (PERI-I) PERIE J; (REDO-I) REDOULES D; (UYTO-N) UNIV TOULOUSE III SABATIER PAUL
COUNTRY COUNT: 27

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2003024952	A1	20030327	(200333)*	FR	35[0]	
FR 2829762	A1	20030321	(200333)	FR		
EP 1427717	A1	20040616	(200439)	FR		
US 20040236098	A1	20041125	(200478)	EN		
JP 2005508908	W	20050407	(200524)	JA	27	
US 7084172	B2	20060801	(200650)	EN		
EP 1427717	B1	20061122	(200677)	FR		
DE 60216296	E	20070104	(200705)	DE		
ES 2275923	T3	20070616	(200742)	ES		
DE 60216296	T2	20070621	(200743)	DE		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003024952 A1		WO 2002-FR3148	20020916
FR 2829762 A1		FR 2001-11982	20010917
DE 60216296 E		DE 2002-616296	20020916
EP 1427717 A1		EP 2002-779635	20020916
EP 1427717 B1		EP 2002-779635	20020916
DE 60216296 E		EP 2002-779635	20020916
ES 2275923 T3		EP 2002-779635	20020916
EP 1427717 A1		WO 2002-FR3148	20020916
US 20040236098 A1		WO 2002-FR3148	20020916
JP 2005508908 W		WO 2002-FR3148	20020916
US 7084172 B2		WO 2002-FR3148	20020916
EP 1427717 B1		WO 2002-FR3148	20020916
DE 60216296 E		WO 2002-FR3148	20020916
JP 2005508908 W		JP 2003-528800	20020916
US 20040236098 A1		US 2004-489736	20040316
US 7084172 B2		US 2004-489736	20040316
DE 60216296 T2		DE 2002-616296	20020916
DE 60216296 T2		EP 2002-779635	20020916
DE 60216296 T2		WO 2002-FR3148	20020916

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 60216296	E	Based on	EP 1427717	A
ES 2275923	T3	Based on	EP 1427717	A
EP 1427717	A1	Based on	WO 2003024952	A
JP 2005508908	W	Based on	WO 2003024952	A
US 7084172	B2	Based on	WO 2003024952	A
EP 1427717	B1	Based on	WO 2003024952	A
DE 60216296	E	Based on	WO 2003024952	A
DE 60216296	T2	Based on	EP 1427717	A
DE 60216296	T2	Based on	WO 2003024952	A

PRIORITY APPLN. INFO: FR 2001-11982 20010917

AB WO 2003024952 A1 UPAB: 20050903

NOVELTY - Bioprecursors (I) are new.

DETAILED DESCRIPTION - Bioprecursors of formula (I) are new.

A1 and A2 = groups derived from anti-inflammatories, antibacterials, antibiotics, and vitamins;

X and Y = H, OH, or 1-20C alkyl; and
n = 0-10.
An INDEPENDENT CLAIM is included for the preparation of (I).
ACTIVITY - Dermatological; Antiinflammatory; Antibacterial.
MECHANISM OF ACTION - None given.
USE - Compounds are used for skin treatment in dermatology and cosmetology.
ADVANTAGE - The active molecules are liberated in the skin by enzymatic action, giving improved biodispersibility and preventing side effects due to accumulation.

AN.S DCR-701668
CN.S Succinic acid 2-(2,2-dimethyl-[1,3]dioxolan-4-yl)-4-hydroxy-5-oxo-2,5-dihydro-furan-3-yl ester 2,5,7,8-tetramethyl-2-(4,8,12-trimethyl-tridecyl)-chroman-6-yl ester
SDCN RAA7NB

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

L50 ANSWER 16 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-354426 [33] WPIX
CROSS REFERENCE: 2003-268409
DOC. NO. CPI: C2003-093329 [33]
TITLE: New ascorbic acid derivatives, useful e.g. as antioxidants and medicaments, comprise ascorbic acid covalently bound to lysine or proline
DERWENT CLASS: B03; D13; D21; E13
INVENTOR: IVANOV V; NETKE S; NIEDZWIECKI A; RATH M; ROOMI W; ROOMI W M; VADIMANOV
PATENT ASSIGNEE: (IVAN-I) IVANOV V; (NETK-I) NETKE S; (NIED-I) NIEDZWIECKI A; (RATH-I) RATH M; (ROOM-I) ROOMI W M
COUNTRY COUNT: 98

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2003018000	A1	20030306	(200333)*	EN	41[4]	
AU 2002323394	A1	20030310	(200452)	EN		
US 20040167077	A1	20040826	(200457)	EN		
US 7230124	B2	20070612	(200740)#	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003018000 A1		WO 2002-US27060	20020823
US 20040167077 A1	Provisional	US 2001-314857P	20010824
AU 2002323394 A1		AU 2002-323394	20020823
US 20040167077 A1	Cont of	US 2002-226588	20020823
US 20040167077 A1		US 2004-781296	20040218
US 7230124 B2		US 2004-781296	20040218

FILING DETAILS:

PATENT NO	KIND	PATENT NO

AU 2002323394 A1 Based on WO 2003018000 A

PRIORITY APPLN. INFO: US 2001-314857P 20010824
US 2002-226588 20020823
US 2004-781296 20040218

AB WO 2003018000 A1 UPAB: 20050529
NOVELTY - Compounds (I) comprising L-ascorbic acid covalently bound to lysine or proline molecules or groups are new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) preparation of (I); and

(2) a pharmaceutical composition comprising one of the following compounds (I) and a carrier: ascorbyl-6-lysine, ascorbyl-2-lysine, ascorbyl-6-polylysine, ascorbyl-2,6-dilysine, ascorbyl-6-polylysine-2-lysine, ascorbyl-6-lysine-2-polylysine, ascorbyl-2,6-polylysine, ascorbyl-6-proline, ascorbyl-2-proline, ascorbyl-6-polyproline, ascorbyl-2-polyproline, ascorbyl-2,6-diproline, ascorbyl-2-proline-6-polyproline, ascorbyl-2-polyproline 6-proline, ascorbyl-2,6-diproline, 6-deoxyascorbyllysine, 6-deoxyascorbylproline, 6-deoxyascorbylpolylysine, 6-deoxyascorbylpolyproline, 6-deoxyascorbyllysine-2-proline, 6-deoxyascorbylproline-2-lysine, 6-deoxyascorbylpolylysine-2-proline, 6-deoxyascorbylpolyproline-2-lysine, 6-deoxyascorbyllysine-2-polyproline, 6-deoxyascorbylproline-2-polylysine, 6-deoxyascorbate proline-2-lysine-proline, 6-deoxyascorbate-2-proline-lysine, 6-deoxyascorbyllysine, 6-deoxyascorbate-lysine-proline, 6-deoxyascorbyl-lysine-2-proline, 6-deoxyascorbyl-polylysine-2-proline, 6-deoxyascorbyl-lysine-2-polyproline, 6-deoxyascorbyl-lysine-2-lysine-proline, 6-deoxyamino ascorbyl-polylysine, 6-deoxyamino ascorbyl-lysine-proline, 6-deoxyamino ascorbylproline, 6 deoxyamino ascorbylpolyproline.

ACTIVITY - Dermatological; Vulnerary.

No biological data given.

MECHANISM OF ACTION - None given.

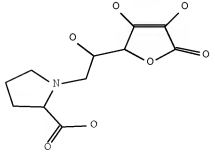
USE - (I) Are useful are useful in research fields including medicine, nutrition, physiology and pharmacology applications. Pharmaceutical compositions containing selected compounds (I) are useful for preventing the degradation of extracellular matrix, for stabilizing connective tissue, as antioxidants and treating damage to skin (all claimed).

ADVANTAGE - (I) Provide superior biological effects compared to their individual components, including increased biological stability, enhanced adsorption by biological cell compartments, greater biological efficacy, and the ability to facilitate and enhance the assimilation of other nutritional components from foods.

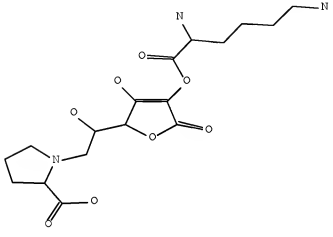
AN.S DCR-703289

CN.S 1-[2-(3,4-Dihydroxy-5-oxo-2,5-dihydro-furan-2-yl)-2-hydroxy-ethyl]-pyrrolidine-2-carboxylic acid

SDCN RAA8U2



AN.S DCR-703408
CN.S 1-{2-[4-(2,6-Diamino-hexanoyloxy)-3-hydroxy-5-oxo-2,5-dihydro-furan-2-yl]-2-hydroxy-ethyl}-pyrrolidine-2-carboxylic acid
SDCN RAA8X8



L50 ANSWER 17 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-670128 [63] WPIX
CROSS REFERENCE: 2005-733613
DOC. NO. CPI: C2003-182668 [63]
DOC. NO. NON-CPI: N2003-535021 [63]
TITLE: Silver halide emulsion sheet for detecting track of charged elementary particles, comprises an emulsion layer containing a benzotriazole and a protective colloid layer, on both sides of a transparent support
DERWENT CLASS: E13; G06; P83
INVENTOR: KUWABARA K
PATENT ASSIGNEE: (FUJF-C) FUJI PHOTO FILM CO LTD; (KUWA-I) KUWABARA K
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
US 20030096203	A1 20030522	(200363)*	EN	10[0]	
US 6916600	B2 20050712	(200546)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 20030096203	A1	US 2002-244671	20020917

PRIORITY APPLN. INFO: JP 2001-285962 20010919
AB US 20030096203 A1 UPAB: 20060203

NOVELTY - A silver halide emulsion sheet comprises at least one silver halide emulsion layer and at least one hydrophilic protective colloid layer, provided on both sides of a transparent support. The silver halide emulsion layer(s) contains a benzotriazole compound.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) processing of the silver halide emulsion sheet, which involves using developer comprising a compound of formula (A) as developing agent; and

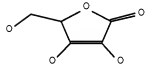
(2) the developer.

R1 = H, alkyl, aryl or heterocyclic groups.

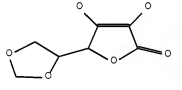
USE - Nuclear plate for detecting and recording track of charged elementary particles.

ADVANTAGE - The silver halide emulsion sheet has excellent fading treatment suitability and results in enhancement of reliability of recording and detecting track of charged elementary particles. The sheet has excellent stability and handling properties and can be produced in large quantities.

AN.S DCR-295126
CN.S 3,4-Dihydroxy-5-hydroxymethyl-5H-furan-2-one
SDCN RA1YWU



AN.S DCR-756468
CN.S 5-[1,3]Dioxolan-4-yl-3,4-dihydroxy-5H-furan-2-one
SDCN RAB8N6



L50 ANSWER 18 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-729828 [69] WPIX
DOC. NO. CPI: C2003-200611 [69]
TITLE: Increasing concentration of ascorbic acid and acetone in skin for preventing skin oxidation, by hydrolyzing composition with 5,6-ortho-isopropylidene L-ascorbic acid, propylene glycol, glycerin, 2-phenoxyethanol, zinc sulfate, and water
DERWENT CLASS: B03; D21; E13
INVENTOR: RUHE R C
PATENT ASSIGNEE: (RUHE-I) RUHE R C
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
US 6602906	B1	20030805	(200369)*	EN	5[0]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 6602906 B1		US 2002-683994	20020309

PRIORITY APPLN. INFO: US 2002-683994 20020309

AB US 6602906 B1 UPAB: 20050601

NOVELTY - Increasing concentration of ascorbic acid and acetone in skin comprises hydrolyzing a composition containing 5,6-O-isopropylidene L-ascorbic acid, propylene glycol, glycerin, 2-phenoxyethanol, zinc sulfate, and water to obtain a hydrolyzed composition. The hydrolyzing is carried out by the action of non-specific esterases located in the dermal layer of the skin upon topical application of the composition.

ACTIVITY - Dermatological.

No biological data given.

MECHANISM OF ACTION - Ultraviolet-induced Immunosuppressor; Tyrosinase Inhibitor.

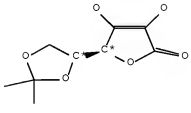
USE - For increasing concentration of ascorbic acid and acetone in skin for preventing oxidative damage to skin, and scurvy.

ADVANTAGE - The invention effectively establishes and maintains beneficial levels of ascorbic acid and acetone in the dermal layer of the skin. It can be better absorbed into the dermis with minimal disruption of the structural integrity of the skin.

AN.S DCR-302190

CN.S 5-(2,2-Dimethyl-[1,3]dioxolan-4-yl)-3,4-dihydroxy-5H-furan-2-one

SDCN RA2OD5



L50 ANSWER 19 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN

ACCESSION NUMBER: 2003-560631 [53] WPIX

CROSS REFERENCE: 2003-515365; 2003-543643; 2003-543644; 2003-589449

DOC. NO. CPI: C2003-151291 [53]

TITLE: Cosmetic or dermatological composition for depigmenting or bleaching skin or hair, containing ascorbic acid or derivative as active agent and N-vinyl-imidazole (co)polymer as stabilizer

DERWENT CLASS: A96; B05; D21
INVENTOR: BIATRY B; LHEUREUX E
PATENT ASSIGNEE: (OREA-C) L'OREAL SA
COUNTRY COUNT: 30

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
EP 1316306	A1	20030604	(200353)*	FR	13[0]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1316306 A1		EP 2002-292812	20021112

PRIORITY APPLN. INFO: FR 2001-15375 20011128

AB EP 1316306 A1 UPAB: 20050531

NOVELTY - Use of a composition (I) for bleaching the skin and/or hair, where (I) includes an aqueous phase containing at least one hydrophilic, oxidation-sensitive active agent (A) selected from ascorbic acid and its derivatives and at least one non-crosslinked polymer or copolymer of N-vinyl-imidazole (NVA) (B).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) use of a combination of (A) and (B) in the aqueous phase of a cosmetic composition for bleaching the skin and/or hair;

(2) use of (A) and (B) in the preparation of a dermatological composition, including an aqueous phase, for depigmenting the skin and/or hair; and

(3) a cosmetic process for depigmenting and/or bleaching the skin and/or hair, involving application of (I).

ACTIVITY - Dermatological.

MECHANISM OF ACTION - Tyrosinase-Inhibitor; Melanogenesis-Inhibitor.

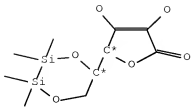
USE - (I) Are useful as cosmetic and/or dermatological compositions for depigmenting and/or bleaching the skin and/or hair.

ADVANTAGE - The polymers (B) stabilize the active agents (A) in the aqueous phase, so that (I) can be stored without special precautions. Inclusion of (B) does not adversely affect the depigmenting/bleaching power of A) or the cosmetic properties (e.g. tolerance and 'feel') of (I). Also the (A)/(B) combination inhibits the dendricity of melanocytes (in addition to the tyrosinase/melanogenesis inhibiting action of (A)), and thus has a superior depigmenting action to (A) alone. In an accelerated aging test, inclusion of 1 % Luvitec VPI 55K72W (RTM; vinyl pyrrolidone-vinyl imidazole (50/50) copolymer of weight average molecular weight 1200000) in a 15 % aqueous solution of ascorbic acid (pH 6) reduced the degree of degradation of ascorbic acid after storage for 2 months at 45 degrees C under air in a brown glass bottle from 43 % to 10.8 %.

AN.S DCR-734911

CN.S 3,4-Dihydroxy-5-(2,2,3,3-tetramethyl-[1,4,2,3]dioxadisilinan-5-yl)-5H-furan-2-one

SDCN RAASPQ



L50 ANSWER 20 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2003-543644 [52] WPIX
CROSS REFERENCE: 2003-515365; 2003-543643; 2003-560631; 2003-589449
DOC. NO. CPI: C2003-147678 [52]
TITLE: Cosmetic or dermatological composition for combating skin aging, containing ascorbic acid or derivative as active agent and N-vinyl-imidazole (co)polymer as stabilizer
DERWENT CLASS: A96; B05; D21
INVENTOR: BIATRY B; LHEUREUX E
PATENT ASSIGNEE: (OREA-C) L'OREAL SA
COUNTRY COUNT: 30

PATENT INFO ABBR.:

PATENT NO	KIND DATE	WEEK	LA	PG	MAIN IPC
EP 1316305	A1 20030604 (200352)*		FR	15[0]	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1316305 A1		EP 2002-292811	20021112

PRIORITY APPLN. INFO: FR 2001-15375 20011128
AB EP 1316305 A1 UPAB: 20050531
NOVELTY - Use of a composition (I) for preventing and/or treating the symptoms of intrinsic aging of the skin, where (I) includes an aqueous phase containing at least one hydrophilic, oxidation-sensitive active agent (A) selected from ascorbic acid and its derivatives and at least one non-crosslinked polymer or copolymer of N-vinyl-imidazole (NVA) (B).

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) use of a combination of (A) and (B) in the aqueous phase of a cosmetic composition for preventing and/or treating the symptoms of intrinsic aging of the skin;

(2) use of (A) and B) in the preparation of a dermatological composition, including an aqueous phase, for preventing and/or treating the symptoms of intrinsic aging of the skin; and

(3) a cosmetic process for preventing and/or treating the symptoms of intrinsic aging of the skin, involving application of (I) to the skin or mucosa.

ACTIVITY - Dermatological.

MECHANISM OF ACTION - Collagen-Biosynthesis-Promoter.

USE - (I) Are useful as cosmetic and/or dermatological compositions for preventing and/or treating the symptoms of intrinsic aging of the skin (i.e. aging caused by endogenous factors, rather than exogenous factors such as light). Typically (I) are effective against thinning of the skin, loss of

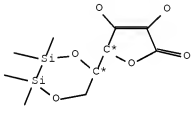
elasticity, deepening of imperfections and appearance of wrinkles and fine lines.

ADVANTAGE - The polymers (B) stabilize the active agents (A) in the aqueous phase, so that (I) can be stored without special precautions. Inclusion of (B) does not adversely affect the antiaging activity of (A) or the cosmetic properties (e.g. tolerance and 'feel') of (I). In an accelerated aging test, inclusion of 1 % Luvitec VPI 55K72W (RTM; vinyl pyrrolidone-vinyl imidazole (50/50) copolymer of weight average molecular weight 1200000) in a 15 % aqueous solution of ascorbic acid (pH 6) reduced the degree of degradation of ascorbic acid after storage for 2 months at 45 degrees C under air in a brown glass bottle from 43 % to 10.8 %.

AN.S DCR-734911

CN.S 3,4-Dihydroxy-5-(2,2,3,3-tetramethyl-[1,4,2,3]dioxadisilinan-5-yl)-5H-furan-2-one

SDCN RAASPQ



L50 ANSWER 21 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN

ACCESSION NUMBER: 2001-570488 [64] WPIX

DOC. NO. CPI: C2001-169536 [64]

TITLE: Neovascularization inhibitor comprises monosodium 5,6-O-benzylidene-L-ascorbate

DERWENT CLASS: B03

INVENTOR: KOCHI M

PATENT ASSIGNEE: (KOCH-I) KOCHI M

COUNTRY COUNT: 83

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
WO 2001056566	A1	20010809	(200164)*	JA	42[0]		<--
							<--
AU 2001030554	A	20010814	(200173)	EN			<--
JP 2001556257	X	20030617	(200349)	JA			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001056566	A1	WO 2001-JP672	20010131
AU 2001030554	A	AU 2001-30554	20010131
JP 2001556257	X	JP 2001-556257	20010131
JP 2001556257	X	WO 2001-JP672	20010131

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2001030554 A	Based on	WO 2001056566 A
JP 2001556257 X	Based on	WO 2001056566 A

PRIORITY APPLN. INFO: JP 2000-24405 20000201

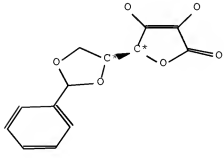
AB WO 2001056566 A1 UPAB: 20050526
NOVELTY - Neovascularization inhibitor comprises monosodium 5,6-O-benzylidene-L-ascorbate (I).
DETAILED DESCRIPTION - Neovascularization inhibitor comprises monosodium 5,6-O-benzylidene-L-ascorbate of formula (I).
ACTIVITY - Ophthalmological; cytostatic; antirheumatic; analgesic. A 65 year old patient with stomach cancer was administered (I) at 4 mg/day in water at 2 mg/2 ml. After 16 days necrosis of the cancer cells was observed.
MECHANISM OF ACTION - VEGF-Antagonist; FGF-Antagonist
USE - Inhibits proliferation and migration of vascular endothelial cells enhanced by growth factors such as vascular endothelial cell growth factor and/or fibroblast growth factor. (I) is thus useful for inhibiting neovascularization e.g. neovascularization enhanced by abnormalities in eye, in cancer tissue or enhanced in a lesion of articular rheumatism and is thus useful for suppressing eye lesions, inhibiting the proliferation and metastasis of cancer and relieving pain caused by rheumatism.
ADVANTAGE - (I) has low toxicity.

AN.S DCR-88700
CN.P 5,6-BENZYLIDENE-ASCORBATE
CN.S 4-hydroxy-5-oxo-2-(2-phenyl-[1,3]dioxolan-4-yl)-2,5-dihydro-furan-3-olate; Sodium
SDCN RA5DDU

CM 1

Na

CM 2



L50 ANSWER 22 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-191482 [25] WPIX
DOC. NO. CPI: C2002-059408 [25]
DOC. NO. NON-CPI: N2002-145241 [25]

TITLE: Developer for black and white silver halide photographic photosensitive material, includes an unsaturated diol derivative and aminoalkylthiol derivative
DERWENT CLASS: E19; G06; P83
INVENTOR: MURAMATSU Y
PATENT ASSIGNEE: (KONS-C) KONICA CORP
COUNTRY COUNT: 1

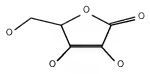
PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
JP 2001324782	A	20011122	(200225)*	JA	50[0]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 2001324782 A		JP 2000-144929	20000517

PRIORITY APPLN. INFO: JP 2000-144929 20000517
AB JP 2001324782 A UPAB: 20050525
NOVELTY - A developer for a black and white silver halide photographic photosensitive material includes:
(a) an unsaturated diol derivative (I);
(b) a specific aminoalkylthiol derivative (II); and
(c) a compound having an acid dissociation constant pK1 of at most 9.80 at 20 degrees C.
DETAILED DESCRIPTION - A developer for a black and white silver halide photographic photosensitive material includes:
(a) an unsaturated diol derivative of formula (I);
(b) a specific aminoalkylthiol derivative of formula (II); and
(c) a compound having an acid dissociation constant pK1 of at most 9.80 at 20 degrees C.
The unsaturated diol derivative (I) is primarily a compound that does not contain hydroquinone.
R1, R2 = optionally substituted alkyl, amino, alkoxy or alkylthio group, or optionally form ring together;
k = 0 or 1;
X = -CO- or -CS when k = 1;
M1, M2 = H or alkali metal;
R21, R22 = H or 1-3C alkyl group optionally having substituent, but not simultaneously H;
R23, R24 = H or 1-3C alkyl group;
R25 = hydroxyl group, amino group, 1-3C alkyl group or phenyl group;
R26, R27 = H, 1-5C alkyl group, 1-18C acyl group or -COOM22, but not simultaneously H;
M21 = H, alkali metallic atom or ammonium group;
M22 = H, 1-4C alkyl group, alkali metallic atom, aryl group or below 15C aralkyl group; and
m = 0, 1 or 2.
An INDEPENDENT CLAIM is also included for the processing method for the developer.
USE - Effectively used in an automatic developing device in the image formation.
AN.S DCR-295126
CN.S 3,4-Dihydroxy-5-hydroxymethyl-5H-furan-2-one
SDCN RA1YWU



L50 ANSWER 23 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-613390 [71] WPIX
DOC. NO. CPI: C2001-183499 [71]
DOC. NO. NON-CPI: N2001-457982 [71]
TITLE: Treatment of photosensitive material for black and white photography containing hydrazine derivative in an emulsion layer uses a specific developer and a specific developer supplimental apparatus
DERWENT CLASS: E19; G06; P83
INVENTOR: MURAMATSU Y
PATENT ASSIGNEE: (KONS-C) KONICA CORP
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
JP 2001183781	A	20010706	(200171)*	JA	25[3]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 2001183781	A	JP 1999-366048	19991224

PRIORITY APPLN. INFO: JP 1999-366048 19991224
AB JP 2001183781 A UPAB: 20050526
NOVELTY - In a development of a silver halide photosensitive material for black and white photography having at least one photosensitive silver halide emulsion layer containing a hydrazine derivative on a substrate using an automatic developing machine, a developer containing substantially no hydroquinone and containing a specific developing agent is used.

DETAILED DESCRIPTION - In a development of a silver halide photosensitive material for black and white photography having at least one photosensitive silver halide emulsion layer containing a hydrazine derivative on a substrate using an automatic developing machine, a developer containing substantially no hydroquinone and containing a developing agent (1) or (2) or both is used, and the development is conducted while supplimenting the developer into the automatic developing machine using a developer stock tank having a opening area rate of 50 % or less in the horizontal cross-section area.

R1, R2 = optionally substituted alkyl, amino, alkoxy or alkylthio, or may form a ring together;

k = 0 or 1;

X = CO or CS;

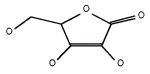
M1, M2 = H or alkali metal;

R = SO3M, COOM (M = H, alkali metal or optionally substituted ammonium), or optionally substituted amino or ammonium;

n = 1 or 2;

m = 1-3.
USE - For photography.
ADVANTAGE - Change of the photographic performances is small in the running.

AN.S DCR-295126
CN.S 3,4-Dihydroxy-5-hydroxymethyl-5H-furan-2-one
SDCN RA1YWU



L50 ANSWER 24 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2002-001994 [01] WPIX
CROSS REFERENCE: 2000-097491; 2001-420797
DOC. NO. CPI: C2002-000775 [01]
DOC. NO. NON-CPI: N2002-001498 [01]
TITLE: Flux for solder, containing derivatives of vitamin-c or vitamin-e that stabilize it
DERWENT CLASS: A97; E11; E13; L03; M23; P53; P55; V04; X24
INVENTOR: AMITA H; MURASE N; NAGASAKI S; SHIBUYA Y; SHOJI T; TAGUCHI I
PATENT ASSIGNEE: (AMIT-I) AMITA H; (MURA-I) MURASE N; (NAGA-I) NAGASAKI S; (SHIB-I) SHIBUYA Y; (SHOJ-I) SHOJI T; (SHOW-C) SHOWA DENKO KK; (TAGU-I) TAGUCHI I
COUNTRY COUNT: 2

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
JP 2001150183	A	20010605	(200201)*	JA	10[0]		<--
							<--
US 20020046627	A1	20020425	(200233)	EN			<--
JP 4223648	B2	20090212	(200916)	JA	15		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 2001150183	A	JP 1999-343361	19991202
US 20020046627	A1 Provisional	US 2000-232432P	20000914
US 20020046627	A1	US 2001-951486	20010914
JP 4223648	B2	JP 1999-343361	19991202

FILING DETAILS:

PATENT NO	KIND	PATENT NO	
JP 4223648	B2 Previous Publ	JP 2001150183	A

PRIORITY APPLN. INFO: JP 1999-343361 19991202

JP 1998-161854	19980610
JP 1998-336898	19981127
JP 1999-26472	19990203
JP 1999-88935	19990330
JP 1999-283870	19991005

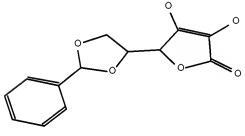
AB JP 2001150183 A UPAB: 20050524

NOVELTY - Flux for solder containing at least one of (ascorbic acid-2-phosphoric acid), (ascorbic acid-2-sulfuric acid), (ascorbic acid-2-glucoside), (ascorbic acid-2,6-dibutylate), (ascorbic acid-2,6-distearate), (ascorbic acid-2,6-di-myristirate), (ascorbic acid-6-palmitate), (ascorbic acid-6-stearate), (ascorbic acid-6-myristirate), (ascorbic acid-2,3,5,6-tetrapalmitate), (ascorbic acid-2,3,5,6-tetramyristirate), (ascorbic acid-2,3,5,6-tetrastearate), (ascorbic acid-2-glucoside-6-palmitate), (ascorbic acid-2-glucoside-6-myristirate), (ascorbic acid-2-glucoside-6-stearate), (ascorbic acid-5,6-benzylidene), (ascorbic acid-5,6-propylidene), (ascorbic acid-2-phosphoric acid-5,6-benzylidene), and (ascorbic acid-2--phosphoric acid-5,6-propylidene).

USE - Used as flux for solder and solder paste.

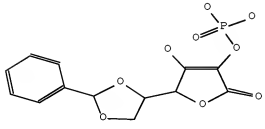
ADVANTAGE - This method is able to reduce the interaction between solder alloy and flux a great deal, and Pb free solder can be preserved stable, besides using this flux soldering of fine pitched circuits can be carried out with ease.

AN.S DCR-171106
CN.S 3,4-Dihydroxy-5-(2-phenyl-[1,3]dioxolan-4-yl)-5H-furan-2-one
SDCN RA5O2M

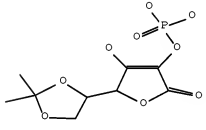


AN.S DCR-302190
CN.S 5-(2,2-Dimethyl-[1,3]dioxolan-4-yl)-3,4-dihydroxy-5H-furan-2-one
SDCN RA2OD5

AN.S DCR-473893
CN.S Phosphoric acid mono-[4-hydroxy-2-oxo-5-(2-phenyl-[1,3]dioxolan-4-yl)-2,5-dihydro-furan-3-yl] ester
SDCN RA5O2N



AN.S DCR-473894
CN.S Phosphoric acid mono-[5-(2,2-dimethyl-[1,3]dioxolan-4-yl)-4-hydroxy-2-oxo-2,5-dihydro-furan-3-yl] ester
SDCN RA5O2O



L50 ANSWER 25 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-384382 [41] WPIX
DOC. NO. CPI: C2001-117641 [41]
DOC. NO. NON-CPI: N2001-282119 [41]
TITLE: Silver halide photographic material and its processing
DERWENT CLASS: A89; E19; G06; P83
INVENTOR: TAKABAYASHI T
PATENT ASSIGNEE: (KONS-C) KONICA CORP
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
JP 2001033912	A	20010209	(200141)*	JA	71[0]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

JP 2001033912 A JP 1999-201740 19990715

PRIORITY APPLN. INFO: JP 1999-201740 19990715
AB JP 2001033912 A UPAB: 20050706
NOVELTY - The Ag halide photographic material, having multiple composing layers on a support, the outer-most layer of the composing layers contains urethane latex, fluoro-type surfactant and lubricating agent.

DETAILED DESCRIPTION - Preferred layer: The Ag halide photographic material in which at least one of the composing layers contains the compound latex, which comprises inorganic particles and hydrophobic polymer.

Preferred material: The Ag halide photographic material in which at least one of the composing layers contains hydrazine derivatives, and the layer, containing the hydrazine derivatives, or the other layer(s) contain(s) amine compound(s) and/or quaternary onium compound(s).

INDEPENDENT CLAIMS are also included :

(1) for the processing method for the Ag halide photographic material, in which the material is processed through the automatic processor, which includes the processing steps for the material, utilizing developer, fixer, stabilizer, washing and/or rinsing solutions, and the drying steps, with the total processing time, from the developing step to the drying step, of 10 - 60 seconds, dry to dry;

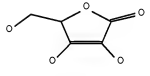
(2) amount of developer replenisher;

(3) a method of washing; and

(4) an aliphatic developing agent

USE - The material and processing are suitable for preparation of halftone image for the graphic arts process, providing fine halftone patterns with extreme high contrast through automatic processing of less than 90 seconds.

AN.S DCR-295126
CN.S 3,4-Dihydroxy-5-hydroxymethyl-5H-furan-2-one
SDCN RA1YWU



L50 ANSWER 26 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-245882 [26] WPIX
DOC. NO. CPI: C2001-074085 [26]
DOC. NO. NON-CPI: N2001-175011 [26]
TITLE: Color photographic recording material with improved image stability contains water insoluble stabilizer with ethylenic unsaturation and alkyl, acyl, aryl or alkenyl groups
DERWENT CLASS: E19; G06; P83
INVENTOR: HAGEMANN J
PATENT ASSIGNEE: (GEVA-C) AGFA-GEVAERT AG
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC

DE 19932496	A1 20010118 (200126)* DE	10[0]	<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
DE 19932496 A1		DE 1999-19932496	19990712

PRIORITY APPLN. INFO: DE 1999-19932496 19990712

AB DE 19932496 A1 UPAB: 20050525

NOVELTY - Color photographic recording material contains a water insoluble stabilizer with ethylenic unsaturation and alkyl, acyl, aryl or alkenyl groups to give improved image stability.

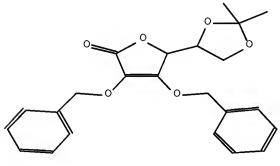
DETAILED DESCRIPTION - Color photographic recording material includes at least one silver halide emulsion layer containing a water insoluble stabilizer of formula (I).

R1-R4 = H, alkyl, aryl, acyl or alkenyl, provided that not both of R1 and R2 or R3 and R4 are H and R1 and R2 or R3 and R4 can form a non-aromatic 5 or 6 membered ring.

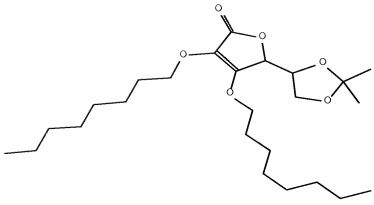
USE - For color negative films, color reverse films, color positive films, color photographic paper, color reverse photographic paper an materials used in color diffusion transfer processes.

ADVANTAGE - Image stability is improved.

AN.S DCR-374050
CN.S 3,4-Bis-benzyloxy-5-(2,2-dimethyl-[1,3]dioxolan-4-yl)-5H-furan-2-one
SDCN RA3LNZ



AN.S DCR-374054
CN.S 5-(2,2-Dimethyl-[1,3]dioxolan-4-yl)-3,4-bis-octyloxy-5H-furan-2-one
SDCN RA3LO3



L50 ANSWER 27 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-036979 [05] WPIX
DOC. NO. CPI: C2001-011116 [05]
DOC. NO. NON-CPI: N2001-029329 [05]
TITLE: High speed processing of a silver halide photosensitive material comprises using a hydroquinone-free developer, and contacting the surface with a drying material
DERWENT CLASS: E19; G06; P83; P84
INVENTOR: AOKI A
PATENT ASSIGNEE: (KONS-C) KONICA CORP
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
JP 2000305224	A	20001102	(200105)*	JA	15[1]		<--

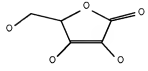
APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 2000305224	A	JP 1999-116540	19990423

PRIORITY APPLN. INFO: JP 1999-116540 19990423
AB JP 2000305224 A UPAB: 20050524
NOVELTY - A silver halide photosensitive material is processed by an automatic developing machine. A developer, which contains no hydroquinone, but contains a new compound, is used in developing the photosensitive material. When drying the photosensitive material, the surface of the photosensitive material is contacted with a drying material that has previously been heated.
DETAILED DESCRIPTION - The new compound, which is contained in the developer, is of formula R1-C(OM1)=C(OM2)-(X)k-R2 (I);
R1, R2 = optionally substituted alkyl, amino, alkoxy, or alkylthio; they may be combined to form a ring;
k = 0 or 1;
X = -CO- or -CS- when k = 1;
M1, M2 = H or an alkali metal.
USE - This method of processing a silver halide photosensitive material is used in printing plate making for an image setter.

ADVANTAGE - The photosensitive material is processed at a high speed. Pollution is effectively prevented. In addition, size stability is attained.

AN.S DCR-295126
CN.S 3,4-Dihydroxy-5-hydroxymethyl-5H-furan-2-one
SDCN RA1YWU



L50 ANSWER 28 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-161756 [17] WPIX
DOC. NO. CPI: C2001-048462 [17]
DOC. NO. NON-CPI: N2001-118024 [17]
TITLE: Developer for silver halide photosensitive material and development of silver halide photosensitive material using this developer
DERWENT CLASS: E19; G06; P83; P84
INVENTOR: TSUKADA K
PATENT ASSIGNEE: (KONS-C) KONICA CORP
COUNTRY COUNT: 2

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
JP 2000275794	A	20001006	(200117)*	JA	25[2]		<--
							<--
US 6218092	B1	20010417	(200123)	EN			<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 2000275794	A	JP 1999-77018	19990323
US 6218092	B1	US 2000-532908	20000322

PRIORITY APPLN. INFO: JP 1999-77018 19990323
AB JP 2000275794 A UPAB: 20050525
NOVELTY - A silver halide photosensitive material has at least one silver halide photosensitive emulsion layer on a support. This photosensitive material is developed, fixed, and water washed by an automatic developing machine. The automatic developing machine has a developing bath which consists of a developing tank and a temperature adjusting tank. Their capacity ratio (temperature adjusting bath over developing tank) is 0.4 to 1.0.

DETAILED DESCRIPTION - A developer which is used in the developing bath contains reductones of formula (I) under a condition represented in the following expression L0.75x T= 50 to 150:

L = the conveyor length of the developing machine and ranges from 0.5 to 0.8 m;

T = total dry to dry processing time.

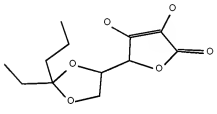
R1, R2 = hydroxy, mercapto, optionally substituted amino, acylamino, alkylsulfonylamino, arylsulfonylamino, alkoxycarbonyl, or alkylthio;

Z = an atomic group required to form an optionally substituted 5- or 6-member ring.

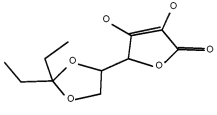
USE - None given.

ADVANTAGE - Even when the amount of the supplementary developer is reduced, the activity of the developer will not decrease.

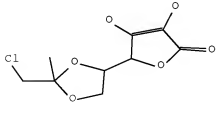
AN.S DCR-343944
CN.S 5-(2-Ethyl-2-propyl-[1,3]dioxolan-4-yl)-3,4-dihydroxy-5H-furan-2-one
SDCN RA2Z4J



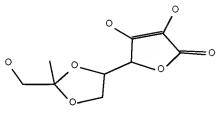
AN.S DCR-343945
CN.S 5-(2,2-Diethyl-[1,3]dioxolan-4-yl)-3,4-dihydroxy-5H-furan-2-one
SDCN RA2Z4K



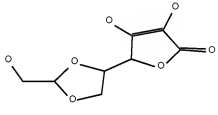
AN.S DCR-343947
CN.S 5-(2-Chloromethyl-2-methyl-[1,3]dioxolan-4-yl)-3,4-dihydroxy-5H-furan-2-one
SDCN RA2Z4M



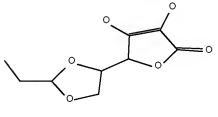
AN.S DCR-343948
CN.S 3,4-Dihydroxy-5-(2-hydroxymethyl-2-methyl-[1,3]dioxolan-4-yl)-5H-furan-2-one
SDCN RA2Z4N



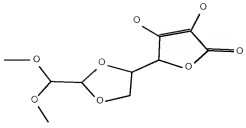
AN.S DCR-343950
CN.S 3,4-Dihydroxy-5-(2-hydroxymethyl-[1,3]dioxolan-4-yl)-5H-furan-2-one
SDCN RA2Z4P



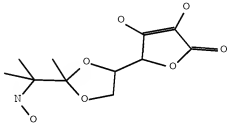
AN.S DCR-343951
CN.S 5-(2-Ethyl-[1,3]dioxolan-4-yl)-3,4-dihydroxy-5H-furan-2-one
SDCN RA2Z4Q



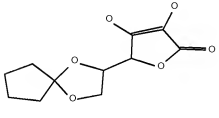
AN.S DCR-343952
CN.S 5-(2-Dimethoxymethyl-[1,3]dioxolan-4-yl)-3,4-dihydroxy-5H-furan-2-one
SDCN RA2Z4R



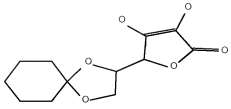
AN.S DCR-343954
CN.S 3,4-Dihydroxy-5-[2-(1-hydroxyamino-1-methyl-ethyl)-2-methyl-[1,3]dioxolan-4-yl]-5H-furan-2-one
SDCN RA2Z4T



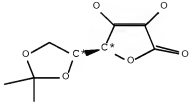
AN.S DCR-343958
CN.S 5-(1,4-Dioxa-spiro[4.4]non-2-yl)-3,4-dihydroxy-5H-furan-2-one
SDCN RA2Z4X



AN.S DCR-343959
CN.S 5-(1,4-Dioxa-spiro[4.5]dec-2-yl)-3,4-dihydroxy-5H-furan-2-one
SDCN RA2Z4Y



AN.S DCR-302190
CN.S 5-(2,2-Dimethyl-[1,3]dioxolan-4-yl)-3,4-dihydroxy-5H-furan-2-one
SDCN RA2OD5



L50 ANSWER 29 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-010780 [02] WPIX
DOC. NO. CPI: C2001-002951 [02]
DOC. NO. NON-CPI: N2001-008259 [02]
TITLE: developer for monochrome silver halide photosensitive material contains primary developing agent, comprising e.g. dihydroxy ketone compound, and e.g. 2-amino-benzene-1,3-diol
DERWENT CLASS: E19; G06; P83
INVENTOR: MURAMATSU Y
PATENT ASSIGNEE: (KONS-C) KONICA CORP
COUNTRY COUNT: 1

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
JP 2000250176	A	20000914	(200102)*	JA	14[0]		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
JP 2000250176	A	JP 1999-47914	19990225

PRIORITY APPLN. INFO: JP 1999-47914 19990225
AB JP 2000250176 A UPAB: 20050524
NOVELTY - A monochrome silver halide photosensitive material has at least one silver halide photosensitive emulsion layer on a support. The photosensitive

material is developed by using a developer which contains a primary developing agent and virtually does not contain hydroquinone. The developer also contains a phenol derivative and has a pH value of 9.4 or less.

DETAILED DESCRIPTION - The primary developing agent is of formula (I). The phenol derivative is of formula (II).

R1, R2 = optionally substituted alkyl, amino, alkoxy, or alkylthio; they may be combined to form a ring;

k = 0 or 1;

X = -CO- or -CS-;

M1, M2 = H or alkali metal;

R = -SO3M-, -COOM-, optionally substituted amino or ammonio;

M = H, alkali metal, or ammonio;

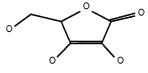
n = 1 or 2;

m = 1, 2, or 3.

USE - The photosensitive material is intended for development by an automatic developing machine.

ADVANTAGE - The developing bath is hardly polluted.

AN.S DCR-295126
CN.S 3,4-Dihydroxy-5-hydroxymethyl-5H-furan-2-one
SDCN RA1YWU



L50 ANSWER 30 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2001-113908 [13] WPIX
DOC. NO. CPI: C2001-033994 [13]
DOC. NO. NON-CPI: N2001-083679 [13]
TITLE: Processing a silver halide light sensitive photographic material useful for ultra-high contrast images, involves developing photographic material with developer solution, fixing with fixer solution, and washing with water.
DERWENT CLASS: E19; G06; P83; P84
INVENTOR: NISHIO S
PATENT ASSIGNEE: (KONS-C) KONICA CORP
COUNTRY COUNT: 26

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
EP 1059562	A1	20001213	(200113)*	EN	35[0]		<--
							<--
JP 2000347363	A	20001215	(200114)	JA	23		<--
							<--
US 6440652	B1	20020827	(200259)	EN			<--
EP 1059562	B1	20030917	(200369)	EN			
DE 60005245	E	20031023	(200377)	DE			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1059562 A1		EP 2000-111807	20000606
JP 2000347363 A		JP 1999-159278	19990607
US 6440652 B1		US 2000-586498	20000602
DE 60005245 E		DE 2000-60005245	20000606
DE 60005245 E		EP 2000-111807	20000606

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 60005245 E	Based on	EP 1059562 A

PRIORITY APPLN. INFO: JP 1999-159278 19990607

AB EP 1059562 A1 UPAB: 20050524

NOVELTY - Enabling ascorbic acid and its derivatives to be used as a developing agent and achieving enhanced reproducibility of originals, without reduction in photographic contrast and sensitivity, and causing silver sludge.

DETAILED DESCRIPTION - Processing of a silver halide light sensitive photographic material comprises:

(a) developing an exposed photographic material with a developer solution;

(b) fixing the developed photographic material with a fixer solution; and

(c) washing with water or stabilizing with a stabilizer solution the fixed photographic material.

The photographic material comprises a support and a silver halide emulsion layer, and the developer solution comprises a compound represented by formula R1-(OM1)C=(OM2)C-(X)k-R2(2) as a developing agent. In (a), a first developer replenishing solution exhibiting activity lower than that of a developer mother solution used at the start of processing is replenished, a first amount to be replenished with the first developer replenishing solution is predetermined in terms of volume per prescribed unit time, so that in case that the replenished amount of the first developer replenishing solution exceeds the first amount within the prescribed unit time, a second developer replenishing solution exhibiting activity higher than that of the first developer replenishing solution is replenished.

R1 and R2 = an alkyl group, an amino group, an alkoxy group, or an alkylthio group, provided that R1 and R2 may combine together with each other to form a ring;

k = 0 or 1;

when k is 1, X = -CO- or -CS-; and

M1, M2 = H or an alkali metal atom.

An INDEPENDENT CLAIM is also included for an apparatus for processing a silver halide light sensitive photographic material comprising:

(i) a developing section to develop an exposed photographic material with a developing solution;

(ii) a fixing section to fix the developed photographic material with a fixer solution; and

(iii) a washing or stabilizing section to wash with water or to stabilize with a stabilizer solution the fixed photographic material.

The apparatus further comprises:

(a) a developer replenishing section to replenish a first developer replenishing solution exhibiting activity lower than that of a developer mother solution used at the start of processing to the developing section

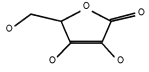
(b) a memory section to memorize a predetermined first amount to be replenished with the first developer replenishing solution in terms of volume per prescribed unit time or a predetermined amount of the photographic material to be processed per prescribed unit time; and

(c) a detecting section to detect the amount of the first developer replenishing solution replenished per prescribed unit time or an amount of the photographic material processed per prescribed unit time; the detecting section detecting that the amount of the first developer replenishing solution replenished exceeds the predetermined first amount memorized in the memory section within the prescribed unit time or when the amount of the photographic material processed exceeds the predetermined amount memorized in the memory section within the prescribed unit time, the developer replenishing section replenishes a second developer replenishing solution exhibiting activity higher than that of the first developer replenishing solution to the developing section.

USE - The photographic material is useful for ultra-high contrast images.

ADVANTAGE - The photographic material has superior reproducibility in high contrast images and improved staining in processing.

AN.S DCR-295126
CN.S 3,4-Dihydroxy-5-hydroxymethyl-5H-furan-2-one
SDCN RA1YWU



L50 ANSWER 31 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2000-681034 [67] WPIX
DOC. NO. CPI: C2000-207240 [67]
DOC. NO. NON-CPI: N2000-504258 [67]
TITLE: Heat mode recording element useful in manufacture of microelectronic circuits for recording comprises transparent support, thin metal recording layer, adhesive layer containing antioxidant and polymeric resin layer
DERWENT CLASS: A85; E13; G03; L03; T03; W04
INVENTOR: D H D; D'HONT D; LAMOTTE J; LOCCUFIER J
PATENT ASSIGNEE: (GEVA-C) AGFA-GEVAERT AG; (GEVA-C) AGFA-GEVAERT NV
COUNTRY COUNT: 26

PATENT INFO ABBR.:

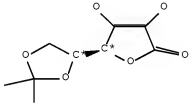
PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
EP 1043720	A1	20001011	(200067)*	EN	16[0]		<--
							<--
JP 2000322769	A	20001124	(200109)	JA	11		<--

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1043720	A1	EP 1999-201091	19990407
JP 2000322769	A	JP 2000-104276	20000406

PRIORITY APPLN. INFO: EP 1999-201091 19990407

AB EP 1043720 A1 UPAB: 20050412
NOVELTY - A heat mode recording element comprises a transparent support (1), a thin metal recording layer (2), an adhesive layer containing at least one adhesive polymer (3) and a polymeric resin layer (4). (3) contains an antioxidant (5).
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for the formation of a heat mode image by exposing a heat mode recording element information-wise to intense laser radiation.
USE - For formation of a recording materials which are used as a medium for recording an image wise modulated laser beam to produce a human readable or machine readable record.
ADVANTAGE - Provides improved stability on aging. Formation of heat mode image using the element provides enough energy.
AN.S DCR-302190
CN.S 5-(2,2-Dimethyl-[1,3]dioxolan-4-yl)-3,4-dihydroxy-5H-furan-2-one
SDCN RA2OD5



L50 ANSWER 32 OF 58 WPIX COPYRIGHT 2009 THOMSON REUTERS on STN
ACCESSION NUMBER: 2000-432976 [38] WPIX
DOC. NO. CPI: C2000-131709 [38]
DOC. NO. NON-CPI: N2000-323249 [38]
TITLE: Image-forming a silver halide photographic light-sensitive material, comprising exposing to a laser beam light while conveying with roller, and processing with a developer composition
DERWENT CLASS: A26; A89; E19; G06; P83
INVENTOR: ITO H
PATENT ASSIGNEE: (KONS-C) KONICA CORP
COUNTRY COUNT: 26

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC	
EP 1011023	A2	20000621	(200038)*	EN	60[0]		<--
							<--
JP 2000181003	A	20000630	(200043)	JA	52		<--
							<--
US 6117611	A	20000912	(200046)	EN			<--
EP 1011023	B1	20040303	(200417)	EN			
DE 69915228	E	20040408	(200425)	DE			
JP 3646285	B2	20050511	(200532)	JA	70		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 1011023 A2		EP 1999-309910	19991209
JP 2000181003 A		JP 1998-354445	19981214
JP 3646285 B2		JP 1998-354445	19981214
DE 69915228 E		DE 1999-69915228	19991209
DE 69915228 E		EP 1999-309910	19991209
US 6117611 A		US 1999-459469	19991213

FILING DETAILS:

PATENT NO	KIND	PATENT NO
DE 69915228 E	Based on	EP 1011023 A
JP 3646285 B2	Previous Publ	JP 2000181003 A

PRIORITY APPLN. INFO: JP 1998-354445 19981214

AB EP 1011023 A2 UPAB: 20060116

NOVELTY - Image-forming method of a silver halide photographic light-sensitive material with no blackened pressure mark caused by abrasion.

DETAILED DESCRIPTION - A silver halide photographic light-sensitive material comprising a light-sensitive silver halide emulsion layer provided on a support, forms an image by:

(1) exposing the silver halide photographic light-sensitive material to a laser beam light while it is conveyed with roller at 15 - 100 mm/sec.;

(2) processing the exposed silver halide photographic light-sensitive material with a developer composition containing a developing agent of formula (A).

R1,R2 = (un)substituted alkyl, amino, alkoxy, alkylthio group, R1 and R2 may form a ring structure with each other;

k = 0 or 1, when k = 1, X = -CO- or -CS-;

M1, M2 = H, alkali metal.

The silver halide photographic light-sensitive material contains an organic enhancing agent(s), the impedance of at least one side of the silver halide photographic light-sensitive material is 4 x 105 - 1020OMEGA.

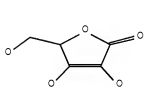
USE - Used in printing and plate-making field.

ADVANTAGE - Causes no adverse effect to photographic characteristics.

AN.S DCR-295126

CN.S 3,4-Dihydroxy-5-hydroxymethyl-5H-furan-2-one

SDCN RA1YWU



L50 ANSWER 33 OF 58 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 151:107572 MARPAT Full-text

TITLE: Hair cleaning agent containing nicotinic acid and/or nicotinamide and panthenol for improving hair

structure
INVENTOR(S): Hippe, Thomas; Schroeder, Thomas
PATENT ASSIGNEE(S): Henkel AG & Co. KGaA, Germany
SOURCE: PCT Int. Appl., 58pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009083283	A1	20090709	WO 2008-EP63311	20081006
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
DE 102007062520	A1	20090625	DE 2007-102007062520071220	

PRIORITY APPLN. INFO.: DE 2007-102007062520071220

AB The invention relates to hair cleaning products that impart advantageous properties to the hair treated therewith regarding the strength, feel and tensile strength of the hair and that are especially mild. The products according to the invention contain in a cosmetically acceptable support, based on the weight thereof, 0.1 to 10% by weight of nicotinic acid and/or nicotinamide, and 0.1 to 10% by weight of panthenol. No formulation example is presented.

MSTR 4

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 15
Note: substitution is restricted

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 34 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 151:63205 MARPAT Full-text
TITLE: Shampoos with a surfactant and hair care combination
INVENTOR(S): Groening, Melanie; Hippe, Thomas; Schroeder, Thomas; Czekala, Madlen
PATENT ASSIGNEE(S): Henkel AG & Co. KGaA, Germany

SOURCE: PCT Int. Appl., 81pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009074366	A1	20090618	WO 2008-EP63309	20081006
DE 102007059705	A1	20090625	DE 2007-102007059705 20071210	

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: DE 2007-102007059705 20071210

AB The invention relates to shampoos, which confer advantageous properties on hair treated therewith and, at the same time, are particularly gentle on dyed hair, wherein the dye is washed out to a significantly lesser extent in spite of a high cleaning performance. The shampoos contain (a) 0.1 to 15% by weight of a cryptoanionic surfactant, (b) 0.1 to 10% by weight of at least one amphoteric surfactant, (c) 0.1 to 10% by weight of at least one nonionic surfactant, (d) 0.001 to 10% by weight of at least one care material from the group (d1) of the cationic guar derivs. and/or (d2) of the cationic cellulose derivs. and/or (d3) of the silicones in a cosmetically acceptable carrier. No composition example is presented.

MSTR 4

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 14
Note: substitution is restricted

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 35 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 150:571620 MARPAT Full-text
TITLE: Hair shampoo having a surfactant-thickener combination
INVENTOR(S): Hippe, Thomas; Kursawe, Petra; Schroeder, Thomas
PATENT ASSIGNEE(S): Henkel A.-G. & Co. K.-G.a.A., Germany
SOURCE: PCT Int. Appl., 55pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009071355	A1	20090611	WO 2008-EP63312	20081006

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

DE 102007058845	A1	20090610	DE 2007-102007058845	20071205

PRIORITY APPLN. INFO.: DE 2007-102007058845 20071205

AB The invention relates to a hair shampoo that imparts advantageous properties to hair treated therewith, and is particularly mild yet still highly viscous and stable in storage, containing in a cosmetically acceptable carrier - based on the weight thereof - (e) 0.1 to 10 weight-% of at least one alkyl polyglycoside, (f) 0.1 to 10 weight-% of at least one betaine of the formula R-CO-NH-(CH2)3-N+[(CH3)2]-CH2-COO-, wherein R is a straight-chained or branched, saturated or mono- or poly-unsatd. alkyl or alkenyl group having 8 to 24 carbon atoms, (c) 0.1 to 10 weight-% of at least one betaine of the formula R-CO-NH-(CH2)2-N+H(CH2-CH2OH)-(CH2)2-COO-, wherein R is a straight-chained or branched, saturated or mono- or poly-unsatd. alkyl or alkenyl group having 8 to 24 carbon atoms, (d) 0.001 to 5 weight-% of xanthan gum, (e) 0.001 to 5 weight-% of at least one cationic guar derivative No formulation example is presented.

MSTR 4

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 14
Note: substitution is restricted

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 36 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 150:313245 MARPAT Full-text
TITLE: Pastel coloring of hair in consecutive bleaching and dyeing steps

INVENTOR(S): Kleen, Astrid; Terrier, Janie
PATENT ASSIGNEE(S): Henkel A.-G, & Co. K.-G.a.A., Germany
SOURCE: PCT Int. Appl., 62pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009030516	A2	20090312	WO 2008-EP53234	20080318
WO 2009030516	A3	20090604		

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

DE 102007041493	A1	20090305	DE 2007-102007041493 20070831

PRIORITY APPLN. INFO.: DE 2007-102007041493 20070831

AB A method for changing the color of keratin fibers, particularly human hair, that substantially avoids damage to the hair and is able to at least partially repair damage that has already occurred, which is to say strengthen the hair structure, comprises these steps that directly follow each other without further intermediate steps: (i) applying a bleaching agent composition to the keratin fibers and allowing it to act over a period from one to 45 min, (ii) rinsing the bleaching agent composition, (iii) applying a coloring agent composition, comprising at least one natural colorant, (iv) rinsing the coloring agent composition The hair dye contains ammonia; it does not contain amines, hydrogen peroxide and other peroxides. Hair dye formulations can include cationic polymers, amino acids, vitamins, ubiquinones, purine derivs., saccharides, 2-furanone derivs., taurine, and bisabolol. No formulation example is given.

MSTR 4

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 14
Note: substitution is restricted

L50 ANSWER 37 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 150:244581 MARPAT Full-text

TITLE: Hair treatment compositions with alcohol(s) and melatonin/agomelatine
INVENTOR(S): Schulze Zur Wiesche, Erik; Poppe, Elisabeth
PATENT ASSIGNEE(S): Henkel A.-G. & Co. K.-G.a.a, Germany
SOURCE: PCT Int. Appl., 97pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009024361	A1	20090226	WO 2008-EP53228	20080318
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
DE 102007039743	A1	20090226	DE 2007-102007039743	20070822

PRIORITY APPLN. INFO.: DE 2007-102007039743 20070822

AB Hair treatment compns. which impart advantageous properties to the hair treated with them and protect the hair against external influences comprise 0.1 to 90% by weight of at least one monohydric alc. from the group ethanol, n-propanol, isopropanol, n-butanol, 0 to 10% by weight of at least one gel former, 0.001 to 5% by weight of melatonin and/or one of its salts and/or agomelatine and/or one of its salts, and 0.001 to 5% by weight of at least one care enhancer from the group L-carnitine and/or its salts; panthenol; the 2-furanones, in particular pantolactone; taurine and/or its salts; vitamins, in particular niacinamide, biotin, pantothenic acid and tocopherol and/or derivs. thereof; ubiquinone; ectoin; allantoin; plant exts. in particular of echinacea or moringa plants; xanthines, in particular caffeine, theophylline and theobromine; flavonoids, in particular flavonols; bisabolol; creatine. Thus a hair tonic contained (weight/weight%) PEG-40 hydrogenated Castor oil 0.2; menthol 0.01; melatonin 0.1; ethanol (96 volume/volume%) 50; D-panthenol (75%) 0.1; octopirox 0.05; water to 100.

MSTR 2

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 9
Note: substitution is restricted

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

L50 ANSWER 38 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 150:244579 MARPAT Full-text
TITLE: Hair treatment compositions with surfactant(s) and melatonin/agomelatine
INVENTOR(S): Schulze Zur Wiesche, Erik; Poppe, Elisabeth
PATENT ASSIGNEE(S): Henkel A.-G. & Co. K.-G.a.a, Germany
SOURCE: PCT Int. Appl., 94pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009024360	A1	20090226	WO 2008-EP53227	20080318

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

DE 102007039741	A1	20090226	DE 2007-102007039741	20070822

PRIORITY APPLN. INFO.: DE 2007-102007039741 20070822

AB Hair treatment compns. which impart advantageous properties to the hair treated with them and protect the hair against external influences comprise at least one anionic surfactant, at least one amphoteric and/or zwitterionic surfactant, 0.001 to 5% by weight of melatonin and/or one of its salts and/or agomelatine and/or one of its salts, and 0.001 to 5% by weight of at least one care enhancer from the group L-carnitine and/or its salts; panthenol; the 2-furanones, in particular pantolactone; taurine and/or its salts; vitamins, in particular niacinamide, biotin, pantothenic acid and tocopherol and/or derivs. thereof; ubiquinone; ectoin; allantoin; plant exts., in particular of echinacea or moringa plants; xanthines, in particular caffeine, theophylline and theobromine; flavonoids, in particular flavonols; bisabolol; creatine. Thus a shampoo contained (weight/weight%): citric acid 0.5; sodium lauryl ether sulfate (25%) 50; disodium cocoamphodiacetate 7; salicylic acid 0.2; D-panthenol (75%) 0.5; sodium benzoate 0.5; Euperlan PK 3000 2; Cetiol HE 1; Polymer JR 400 0.5; melatonin 0.01; PEG-40-hydrogenated castor oil 1; macadamia nut oil 0.2; sodium chloride 0.5; water to 100.

MSTR 3

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 9
Note: substitution is restricted

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 39 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 150:267280 MARPAT Full-text
TITLE: Hair treatment agent with conditioner(s) and melatonin/agomelatine
INVENTOR(S): Schulze Zur Wiesche, Erik; Poppe, Elisabeth
PATENT ASSIGNEE(S): Henkel A.-G. & Co. K.-G.a.a, Germany
SOURCE: PCT Int. Appl., 98pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009024359	A1	20090226	WO 2008-EP53226	20080318

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

DE 102007039745	A1	20090226	DE 2007-102007039745	20070822

PRIORITY APPLN. INFO.: DE 2007-102007039745 20070822

AB Hair treatment agent providing advantageous properties to hair treated therewith and protecting the hair from external influences, contains at least one cationic conditioner, 0.1 to 10 weight % of one or more fatty components, 0.001 to 5 weight % melatonin and/or a salt thereof and/or agomelatine and/or a salt thereof and 0.001 to 5 weight % of at least one conditioning enhancer from the group of L-carnitine and/or a salt thereof, pantolactone, taurine and/or a salt thereof, vitamins, in particular, niacinamide, biotin, pantothenic acid and tocopherol and/or derivs. thereof, ubiquinone, ectoin, allantoin, plant exts. in particular of Echinacea or Moringa plants, xanthines, in particular, caffeine, theophylline and theobromine and flavonoids in particular, flavonols, bisabolol and creatine. Thus a hair conditioning cream contained (weight/weight%): liquid paraffin 1; Dehyquart F 75 2; Varisoft W75 PG 1.5; cetearyl alc. 3.5; lecithin 0.4; propylparaben 0.15; glyceryl stearate 0.7; stearamidopropyldimethylamine 1; Dehyquart A CA 3; citric acid 0.5; methylparaben 0.15; phenoxyethanol 0.4; D-panthenol (75%) 0.2; Gluadin W 20 1; melatonin 0.1; Salcare SC96 1; water to 100.

MSTR 2

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 9
Note: substitution is restricted

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 40 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 150:244574 MARPAT Full-text
TITLE: Hair treatment agent with bacterial enzyme(s) from fermented Thermus thermophilus
INVENTOR(S): Krueger, Marcus; Goddinger, Dieter
PATENT ASSIGNEE(S): Henkel A.-G. & Co. K.-G.a.A., Germany
SOURCE: Eur. Pat. Appl., 59pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 2025331	A2	20090218	EP 2008-5429	20080322
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS				
DE 102007038484	A1	20090219	DE 2007-102007038484820070814	

PRIORITY APPLN. INFO.: DE 2007-102007038484820070814

AB The invention concerns hair treatment agents that include 0.05-5 weight/weight% of fermented Thermus thermophilus. Shampoos, conditioners, hair dyes, permanent wave prepns. are prepared that include fermented Thermus thermophilus along with other components. Thus a shampoo contained (weight/weight%): Stenol 1618 3.0; Genamin KDPM 1.0; Rheocare Ultragel 2.0; panthenol 0.5; fermented Thermus thermophilus 0.5; methylparaben 0.2; phenoxyethanol 0.4; perfume 0.3; water to 100.

MSTR 5

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 15
Note: substitution is restricted

L50 ANSWER 41 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 150:480159 MARPAT Full-text
TITLE: Use of natural 1,3-diols in hair preparation to enhance gloss
INVENTOR(S): Knappe, Thorsten; Scheffler, Rene
PATENT ASSIGNEE(S): Henkel A.-G. & Co. K.-G.a.A., Germany
SOURCE: Ger. Offen., 49pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102008031205	A1	20090430	DE 2008-102008031205 20080703	

PRIORITY APPLN. INFO.: DE 2008-102008031205 20080703

AB The invention concerns the use of 1,3-diols - that are prepared by fermentation - in hair products for enhancing hair shine. 1,3-Propylene glycol is preferred; it has a low UV absorption. Addnl. components are selected from the group of carnitine, carnitine derivs., panthenol, vitamins, 2-furanone derivs., taurine, Coenzyme Q10, ectoin, hydroxyhectoin, allantoin, purine and its derivs., quercetin, rutin, bisabolol and antidandruff agents. PEG is excluded from the formulations. No composition example is presented.

MSTR 2

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 14
Note: substitution is restricted

L50 ANSWER 42 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 148:291595 MARPAT Full-text
TITLE: Hair growth promoting agents containing bioquinones and 2-furanone derivatives
INVENTOR(S): Schulze zur Wiesche, Erik; Poppe, Elisabeth
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany
SOURCE: PCT Int. Appl., 70pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 20080287774	A1	20080313	WO 2007-EP58483	20070816

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,

GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

DE 102006042245 A1 20080327 DE 2006-102006042245 20060906

AU 2007294013 A1 20080313 AU 2007-294013 20070816

EP 2054014 A1 20090506 EP 2007-788453 20070816

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS

PRIORITY APPLN. INFO.: DE 2006-102006042245 20060906

WO 2007-EP58483 20070816

AB The invention relates to cosmetic agents, in particular hair treatment agents, containing at least one derivative of 2-furanone and at least one bioquinone. Treating the hair with said agents activates hair growth. Thus a shampoo contained (weight/weight%): citric acid 0.5; laureth sulfate 13; disodium cocomaphodiacetate 6; salicylic acid 0.2; D-panthenol (75%) 0.2; sodium benzoate 0.5; Euperlan PK 3000 AM 2.6; Cetiol HE 0.5; hydrogenated castor oil 0.1; pantolactone 0.1; ubiquinone 0.001; Ceteareth-25 0.5; sodium chloride 0.5; water to 100.

MSTR 2

G1 = OH / CH2NH2 / NH2 / CO2H

Patent location: claim 1

Note: substitution is restricted

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 43 OF 58 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:523035 MARPAT Full-text

TITLE: Purine and/or purine derivative-containing cosmetics with improved performance

INVENTOR(S): Goddinger, Dieter; Deloswsky, Jens

PATENT ASSIGNEE(S): Henkel KGaA, Germany

SOURCE: Ger. Offen., 70pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

DE 102007008284	A1	20080430	DE 2007-102007008284	20070216
EP 1917955	A2	20080507	EP 2007-13061	20070704
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS				
PRIORITY APPLN. INFO.:			DE 2006-102006051003200610 26	
			DE 2007-102007008284 20070216	

AB The invention concerns cosmetic and hair prepns. that contain (a) 0.0005-5 weight/weight% purine and/or purine derivs.; (b) 0.0001-5 weight/weight% bioquinones of the general formula (I), where X, Y, Z = independently O, -NH, -NR4-or a chemical bond; R1, R2, R3 = independently hydrogen atom or an optionally substituted aryl group or an optionally substituted (C1-C6) alkyl group or a hydroxyalkyl group or a poly- hydroxyalkyl group or an optionally substituted (C1-C6) alkylene group or (C1-C6) acyl group, whereby prefered groups are independently selected from -H, -CH3, -CH2CH3, (CH2)2CH2, CH(CH3)2, (CH2)3CH3, CH(CH3)CH2CH3, -CH2CH(CH3)2, -C(CH3)3, R4 for -CH3, -CH2CH3, (CH2)2CH2, CH(CH3)2, (CH2)3CH3, CH(CH3)CH2CH3, -CH2CH(CH3); and n = 1-20. Thus a sprayable hair conditioner contained (weight/weight%): Monomuls 60-35C 1.24; Eumulgin B1 2.76; Cetiol S 9.0; Cetiol OE 9.0; Dow Corning DC 345 2.0; Gluanidin WQ 2.85; Plantacare 2000 UO 1.00; caffeine 0.001; Coenzyme Q10 0.03; water to 100.

MSTR 3

G1 = OH / CH2NH2 / NH2 / 20

G5 = OH

Patent location: claim 14

Note: substitution is restricted

L50 ANSWER 44 OF 58 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:	148:502674 MARPAT Full-text
TITLE:	Cosmetic compositions comprising purine and/or purine derivatives
INVENTOR(S):	Goddinger, Dieter; Delowsky, Jens
PATENT ASSIGNEE(S):	Henkel KGaA, Germany
SOURCE:	Ger. Offen., 124pp. CODEN: GWXXBX
DOCUMENT TYPE:	Patent
LANGUAGE:	German

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102006050984	A1	20080430	DE 2006-102006050984 20061026	
WO 2008049651	A1	20080502	WO 2007-EP54951	20070522

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: DE 2006-102006050984 20061026

AB A cosmetic composition contains 0.0005-5% purine and/or purine derivative(s) and 0.0001-5% a substance producing a feeling of coolness and/or 0.0001-5% a substance producing a feeling of heat, leading to advantageous effects on skin and hair.

MSTR 7

G1 = OH / CH2NH2 / NH2 / 20

G5 = OH
Patent location: claim 18
Note: substitution is restricted

L50 ANSWER 45 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 148:523034 MARPAT Full-text
TITLE: Polymer-containing cosmetics, especially hair preparations with improved performance
INVENTOR(S): Schulze Zur Wiesche, Erik; Scheunemann, Volker; Schroeder, Thomas; Poppe, Elisabeth
PATENT ASSIGNEE(S): Henkel KGaA, Germany
SOURCE: Ger. Offen., 74pp.

CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102006050650	A1	20080430	DE 2006-102006050650 20061024	
AU 2007308244	A1	20080502	AU 2007-308244	20070920
CA 2666914	A1	20080502	CA 2007-2666914	20070920
WO 2008049701	A1	20080502	WO 2007-EP59928	20070920

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

EP 2054124	A1	20090506	EP 2007-820372	20070920

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS

PRIORITY APPLN. INFO.: DE 2006-102006050650 20061024
WO 2007-EP59928 20070920

AB The invention concerns hair prepns. that contain at least one copolymer at an amount of 0.1-50 weight/weight%; the copolymer is composed of monomers (A1) a quaternized acrylamide derivative of the formula H2C=CR1-Z-[CH2]n-N+R2R3-[A-N+R2R3]m-B-N+R4R5R6 and X- counterions, where the groups are defined; (A2) monomers selected from the group of acrylic acid, methacrylic acid, etc.; (A3) optionally nonionic monomers selected from the group of acrylamide, vinylalc. etc.; the amount of A2 plus A3 monomers is 50-99.9% in the copolymer. Other ingredients are polysiloxanes and cosmetically active substances to enhance the effect of skin and hair. Thus a copolymer was prepared from partially neutralized acrylic acid and (methacryloylaminopropyldimethylammonium)2-hydroxypropyltrimethylammonium dichloride. The copolymer was used in a shampoo as a 0.4 weight/weight% ingredient; further components were (weight/weight%): citric acid 0.5; Texapon NSO 47.3; Dehyton G 17.0; salicylic acid 0.2; D-panthenol (75%) 0.2; sodium benzoate 0.5; Euperlan PK 3000 2.6; Cetiol HE 1.5; Cutina HR 0.5; Dimethicone 500.000 2.0; Ceteareth-25 0.5; sodium chloride 0.2; water to 100.

MSTR 5

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 25

Note: substitution is restricted

L50 ANSWER 46 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 148:151493 MARPAT Full-text
TITLE: Bleaching and/or coloring agent with coolants for improved sensory effect
INVENTOR(S): Hoeffkes, Horst; Semrau, Markus
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: Ger. Offen., 115pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102006031409	A1	20080110	DE 2006-102006031409	20060705
EP 1880705	A2	20080123	EP 2007-13059	20070704

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU

PRIORITY APPLN. INFO.: DE 2006-102006031409 20060705

AB The invention concerns hair bleaching and/or coloring agents that contain (a) 0.001-5 weight/weight% coolants for diminishing potential skin irritation and improving sensory perception; (b) 0.001-10 weight/weight% one or more oxidative dye precursors and/or direct dyes. Thus a bleaching cream contained (weight/weight%): Stenol 1618 10.00; Kokoslorol C12-18 3.00; Eumulgin B2 3.00; ammonium sulfate 1.00; Turpinal SL 0.20; Gluadin W40 4.00; ammonia (25%) 0.62; (1'R,2'S,5'R)-3-(1-menthoxy)-propan-1-ol 0.50; water to 100. The developer included (weight/weight%): Lorol 3.60; Eumulgin B2 0.90; Disponil FES 77IS 2.25; hydrogen peroxide 50% 24.0; Turpinal SL 1.50; Aculyn 33A 15; water to 100. Upon application the two components were mixed at a 1:1 ratio.

MSTR 6

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 11
Note: substitution is restricted

L50 ANSWER 47 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 147:547494 MARPAT Full-text
TITLE: Sugar ester-containing cosmetic agents especially hair preparations
INVENTOR(S): Krueger, Marcus; Poppe, Elisabeth
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft Auf Aktien, Germany
SOURCE: PCT Int. Appl., 211pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007131716	A2	20071122	WO 2007-EP4186	20070511
WO 2007131716	A3	20080214		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

DE 102006022514 A1 20071122 DE 2006-102006022514 20060515
PRIORITY APPLN. INFO.: DE 2006-102006022514 20060515

AB The invention relates to cosmetic agents containing, as a percentage of the total weight thereof, between 0.1 and 10 weight % of at least one saccharose ester of formula (I) wherein the radicals R are independently a hydrogen atom or a group R1-C(O)- or R2-C(O)- or R3-C(O)- or R4-C(O)- or R5-C(O)- or R6-C(O)- or R7-C(O)- or R8-C(O)- and R1 to R8 are an optionally substituted aryl group, an optionally substituted (C1-C24)- alkyl group, or an optionally substituted (C1-C24) alkylene group, with the proviso that at least one of the radicals R is not -H. Said cosmetic agents are used to obtain advantageous products and product characteristics and can also confer advantageous characteristics to the treated body surface areas, especially hair. Thus a shampoo contained (weight/weight%): Stenol 1618 5.00; saccharose ester (a mixture of 10-20 weight/weight% saccharose monoester; 20-25 weight/weight% saccharose diester; 25-35 weight/weight% saccharose triester; 30-35 weight/weight% saccharose tetraester to saccharose octaester, mainly stearyl esters) 0.80; polyisobutene 0.20; Dehyquat A-CA 2.00; panthenol 1.00; methylparaben 0.20; perfume 0.30; phenoxyethanol 0.40; water to 100.

MSTR 3

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 17
Note: substitution is restricted

L50 ANSWER 48 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 147:432968 MARPAT Full-text
TITLE: Hair preparations containing at least two silicones

for improving hair elasticity and shininess
INVENTOR(S): Goddinger, Dieter; Schroeder, Thomas
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany
SOURCE: Eur. Pat. Appl., 54pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1844762	A2	20071017	EP 2007-5550	20070319
EP 1844762	A3	20071128		

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU

DE 102006016908 A1 20071025 DE 2006-102006016908 20060411
PRIORITY APPLN. INFO.: DE 2006-102006016908 20060411

AB The invention concerns hair prepns. that contain two silicones each at 0.01-10 weight/weight% concentration for the improvement of hair elasticity and shininess. The first silicone is of the general formula: (CH3)3Si-[O-Si(CH3)2]x-O-Si(CH3)3, where x = 0-5000, preferably 10-2500; the second silicone is of the general formula: (CH3)3Si-[O-Si(CH3)2]x-[O-(H3C)Si((CH2)k(CH2CH2O)m(CH2CH2CH2O)n)]y-O- Si(CH3)3, where k = 1-20, preferably 2-10, especially 2,3,4,5,6; m = 0-100, preferably 2-50, especially 8-20; n = 0-100, preferably 0-50, especially 8-20; x and y independently = 0-5000, preferably 10-2500; especially 100-1000; (m+n) ≠ 0. Addnl. ingredients are selected from the group of cationic polymers, fatty alc. ether sulfates, amphoteric surfactants, purine and purine derivs., mono- and disaccharides, vitamins, 2-furanone derivs., and bisabolol. No formulation example is given.

MSTR 4

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 15
Note: substitution is restricted

L50 ANSWER 49 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 147:432962 MARPAT Full-text
TITLE: Hair brightening and coloring agents with improved sensory effect
INVENTOR(S): Doering, Thomas; Bossmann, Britta; Hollenberg, Detlev
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany
SOURCE: Eur. Pat. Appl., 114pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1842573	A2	20071010	EP 2007-5873	20070322
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
DE 102006016580	A1	20071011	DE 2006-102006016580 20060406	

PRIORITY APPLN. INFO.: DE 2006-102006016580 20060406

AB The invention concerns a hair preparation that contains: (a) 0.001-10 weight/weight% of and oxidation hair dye precursor and/or direct dye; (b) 0.001-5 weight/weight% of a substance with heat sensory effect; the substance contributes to decreasing skin irritation. Thus a hair bleach contained (weight/weight): Stenol 1618 10.00; Kokoslorol C12-18 3.00; Eumulgin B2 3.00; ammonium sulfate 1.00; Turpinal SL 0.20; Gluadin W40 4.00; allantoin 2.00; ammonia 25% 0.62; vanillyl Bu ether 0.50; water to 100.

MSTR 5

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 8
Note: substitution is restricted

L50 ANSWER 50 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 147:219361 MARPAT Full-text
TITLE: Hair bleaching and/or coloring agent with reduced potential for irritation
INVENTOR(S): Hoeffkes, Horst; Brockmann, Claudia
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft Auf Aktien, Germany
SOURCE: Eur. Pat. Appl., 57pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1813260	A2	20070801	EP 2006-25541	20061211
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
DE 102006003925	A1	20070802	DE 2006-102006003925 20060126	

PRIORITY APPLN. INFO.: DE 2006-102006003925 20060126

AB A composition for dyeing and bleaching of human hair consists of 0.05-10% hydantoin or its derivative, 0.05-10% cationic or amphoteric polymers. The composition is non-irritating to the hair or skin.

MSTR 2

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 9
Note: substitution is restricted

L50 ANSWER 51 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 147:219364 MARPAT Full-text
TITLE: Hair bleaching and/or coloring agent with reduced potential for irritation
INVENTOR(S): Hoeffkes, Horst; Brockmann, Claudia
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany
SOURCE: Eur. Pat. Appl., 54pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1813259	A2	20070801	EP 2006-25549	20061211
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
DE 102006003924	A1	20070802	DE 2006-102006003924 20060126	

PRIORITY APPLN. INFO.: DE 2006-102006003924 20060126

AB A composition for dyeing and bleaching of human hair consists of 0.05-10% valine or its derivative, 0.01-10% protein hydrolyzates. The composition is non-irritating to the hair or skin.

MSTR 2

G1 = OH / 13 / NH2 / 21

G2 = NH2
G6 = OH
Patent location: claim 8

L50 ANSWER 52 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 147:219363 MARPAT Full-text
TITLE: Hair bleaching and/or coloring agent with reduced potential for irritation
INVENTOR(S): Hoeffkes, Horst; Brockmann, Claudia; Doering, Thomas; Reichert, Anja; Pauli, Kristin
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany
SOURCE: Eur. Pat. Appl., 53pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1813258	A2	20070801	EP 2006-25548	20061211
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
DE 102006003926	A1	20070802	DE 2006-102006003926	20060126

PRIORITY APPLN. INFO.: DE 2006-102006003926 20060126

AB A composition for dyeing and bleaching of human hair consists of 0.05-10% valine or its derivative, 0.01-10% chitosan or its derivs.. The composition is non-irritating to the hair or skin.

MSTR 2

G1 = OH / 13 / NH2 / 21

G2 = NH2
G6 = OH
Patent location: claim 7

L50 ANSWER 53 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 147:219400 MARPAT Full-text

TITLE: Hair lightening and/or coloring agents with reduced irritation potential
INVENTOR(S): Hoeffkes, Horst; Brockmann, Claudia
PATENT ASSIGNEE(S): Henkel KGaA, Germany
SOURCE: Ger. Offen., 57pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102006003927	A1	20070802	DE 2006-102006003927	20060126
EP 1825884	A2	20070829	EP 2006-25540	20061211
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				

PRIORITY APPLN. INFO.: DE 2006-102006003927 20060126

AB A composition for lightening and/or dyeing human hair contains, 0.05-10 weight% valine and 0.05-10 weight% cationic and/or amphoteric polymer (s), and these compds. can be worked into hair, leading to a decrease of the irritation potential of this composition A lightening composition was prepared containing valine, and the polymers, Polyquaternium-16, and Polymer W37194. This was mixed with an emulsion comprising 30% H2O2, and Aculyn-33A. This mixture had decreased irritation potential to the hair.

MSTR 2

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 9
Note: substitution is restricted

L50 ANSWER 54 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 145:425253 MARPAT Full-text
TITLE: Oxidation dyes comprising 2-furanones and collagen (derivatives)
INVENTOR(S): Hollenberg, Detlef; Seiler, Martina
PATENT ASSIGNEE(S): Henkel Kommanditgesellschaft auf Aktien, Germany
SOURCE: PCT Int. Appl., 105pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006108505	A2	20061019	WO 2006-EP2759	20060325
WO 2006108505	A3	20070322		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

DE 102005017056 A1 20061026 DE 2005-102005017056 20050412
EP 1868688 A2 20071226 EP 2006-723737 20060325
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
PRIORITY APPLN. INFO.: DE 2005-102005017056 20050412
WO 2006-EP2759 20060325

AB Disclosed are oxidation hair dyes which damage the hair structure less or are even able to repair previously damaged hair. Said oxidation hair dyes contain at least one coupler component and at least one developer component in a water-containing carrier as well as 0.05 to 10 % by weight of collagen and/or collagen hydrolyzate(s) and 0.05 to 15 % by weight of at least one 2-furanone derivative Thus a developer contained (weight/weight%): Lorol C16 3.50; Eumulgin B2 1.00; Disponil FES 77 IS 2.50; dipicolinic acid 0.10; sodiumpyrophosphate, acidic 0.03; Turpinal SL 1.50; hydrogen peroxide 6.00; Aculyn 33 10.00; water to 100. The dye cream included (weight/weight%): Stenol 1628 6.90; Lorol 2.50; Eumulgin B2 2.00; ammonium sulfate 1.75; sodium sulfite 0.50; ascorbic acid 0.50; Turpinal SL 0.20; sodium water glass 40/42 0.50; Gluadin W40 4.00; marine hydrolyzed collagen 1.00; pantolactone 0.50; p-toluylene diamine 0.27; 4-amino-3-methylphenol 0.01; resorcin 0.02; 4-chlororesorcin 0.03; 3-amino-2-methylamino-6-methoxypyridine 0.03; aqueous ammonia 6.30; water to 100. Dye cream and developer were mixed at 2:1 weight ratio upon application.

MSTR 1

G1 = OH / 13 / CH2NH2 / CO2H

G3 = NH
G7 = 32

G8 = 45

Patent location: claim 1

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 55 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 143:379860 MARPAT Full-text
TITLE: Synthetic lactone formulations and method of use
INVENTOR(S): Gomez, Federico M.; Garcia, Gomez-Godoy C. Federico
PATENT ASSIGNEE(S): Magnachem International Laboratories, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 9 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050239877	A1	20051027	US 2005-108198	20050418
WO 2005102315	A1	20051103	WO 2005-US13098	20050418

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-565114P 20040423

AB Natural and synthetic compds. having a lactone structure methods for alleviation of pain, especially pain associated with disorders such as melanoma, leukemia, breast cancer, lung cancer, ovarian cancer, colon cancer, esophagus cancer, liver cancer, and lymphatic cancer. Initial studies have shown that patients can be taken off of morphine when the preferred α-methylene-γ-butyrolactone (Securolide) is administered in a dosage of between 60 and 120 mg/day i.m.

MSTR 2

G1 = O
G2 = O
G3 = OH / alkylthio (opt. substd.) / CO2H (opt. substd.) / CONH2 (opt. substd.)
G5 = 52-45 51-43

Patent location: claim 1
Note: and pharmaceutically acceptable carriers

L50 ANSWER 56 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 140:400110 MARPAT Full-text
TITLE: Synthetic lactone formulations and therapeutic method of use
INVENTOR(S): Terrero, David
PATENT ASSIGNEE(S): Magnachem International Laboratories, Inc., USA; Magnachem Internat Lab Inc
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004041217	A2	20040521	WO 2003-US35468	20031105
WO 2004041217	A3	20040923		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2504886	A1	20040521	CA 2003-2504886	20031105
AU 2003287546	A1	20040607	AU 2003-287546	20031105
US 20050101663	A1	20050512	US 2003-701584	20031105
US 7323495	B2	20080129		

EP 1562930	A2	20050817	EP 2003-781788	20031105	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
CN 1720242	A	20060111	CN 2003-80105227	20031105	
JP 2006506409	T	20060223	JP 2004-548861	20031105	
MX 2005004794	A	20050819	MX 2005-4794	20050504	
IN 2005DN01891	A	20090612	IN 2005-DN1891	20050505	
US 20080125484	A1	20080529	US 2007-947077	20071129	
PRIORITY APPLN. INFO.:			US 2002-424045P	20021105	
			US 2003-701584	20031105	
			WO 2003-US35468	20031105	

AB Natural and synthetic compds. having a lactone structure and methods for using and making the compds. are disclosed. The compds. are useful as antibacterial, antifungal and antiinflammatory agents, and for treating proliferation disorders such as melanoma, leukemia, breast cancer, lung cancer, ovarian cancer, colon cancer, esophagus cancer, liver cancer, and lymphatic cancer. The compds. are also effective for treatment or prevention of inflammatory diseases such as atherosclerosis, lung fibrosis, systemic lupus erythematosus, pancreatitis, sarcoidosis, glomerulitis, and organ transplant rejection. They are also effective for treatment or prevention of bacterial and fungal infections, including treatment of peptic ulcers, gastritis, dyspepsia and gastric cancer, gingivitis and periodontitis. Biol. testing of securolide is presented.

MSTR 3

G1 = OH / alkylthio (opt. substd.) / 106

G2 = O
G3 = O
G11 = OH (opt. substd.) / NH2 (opt. substd.)
Patent location: claim 3

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 57 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 140:181315 MARPAT Full-text
TITLE: Preparation of furanones as cytoprotectants for dermatologic conditions
INVENTOR(S): Boddupalli, Sekhar; Walkinshaw, Gail; Wang, Bing
PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 66 pp., Cont.-in-part of U.S. Ser. No. 354,474.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040029812	A1	20040212	US 2003-630170	20030730
US 20030176361	A1	20030918	US 2003-354474	20030128
US 6667330	B2	20031223		
WO 2005016340	A1	20050224	WO 2004-US24491	20040728

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

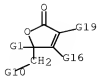
EP 1660080	A1	20060531	EP 2004-786136	20040728

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK

PRIORITY APPLN. INFO.:
US 2002-353939P 20020131
US 2003-354474 20030128
US 2003-630170 20030730
WO 2004-US24491 20040728

AB Title compds. I [R1 = CO2R', CONR'R'', CH2OR''', CN, (un)substituted heterocyclyl, heterocyclylalkyl, heteroaryl, heteroaralkyl; R2, R3 = independently (un)substituted alkyl, cycloalkyl, aryl, aralkyl, heterocyclyl, heteroaryl, heteroaralkyl, nucleoside, amino acid, di-, tri- or tetra-peptide; R4 = H, alkyl, alkylcarbonyl, (poly)alkoxyalkylene, dialkoxyphosphoryloxy; X = alkylene, NR', S, SO, SO2; or XR2 = PO(OR')2; Y = NR', S, SO, SO2; or YR3 = PO(OR')2; or XR2YR3 = (un)substituted aliphatic or aromatic ring; R' = H, alkenyl, (un)substituted alkyl, cycloalkyl, phosphoryl, aryl; R'' = H, alkenyl, (un)substituted alkyl, aryl; or R'R'' = atoms that form (un)substituted 5-7 membered aryl, heteroaryl ring; R''' = H, alkenyl, (un)substituted alkyl, acyl, cycloalkyl, phosphoryl, aryl; and their single tautomers, single stereoisomers, mixts. of tautomers and/or stereoisomers, and pharmaceutically acceptable salts] were prepared as cytoprotectants for treating dermatol. conditions. For example, II was prepared by reaction of 2-mercaptobenzimidazole with Et bromopyruvate in ethanol/acetone and aldol condensation of the two tautomeric forms of the pyruvate intermediate. Selected invention compds. showed significant reduction in edema in assays assessing mouse ear inflammatory response to topical arachidonic acid (10% to 70%, $p < 0.05$). Results from various assays were disclosed for selected invention compds. Thus, I and their pharmaceutical formulations are useful for regulating skin condition, regulating the signs of skin aging or for treating contact dermatitis, skin irritation, acne, rosacea, psoriasis, age-related damage or damage resulting from harmful (UV) radiation or environmental pollution, stress or fatigue.

MSTR 1

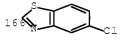


G1 = 13

G3 = NH
G6 = loweralkylene (opt. substd.)
G7 = 14

G10 = 30

G12 = 166



G16 = 42

G17 = S
G19 = OH

Patent location:	claim 1
Note:	substitution is restricted
Note:	and tautomers and pharmaceutically acceptable salts
Note:	additional oxo or thio substitution also claimed
Stereochemistry:	and stereoisomers

MSTR 2

G1 = 8

G2 = 10

G4 = NH
G9 = 11

G12 = CO2H
G13 = S
G15 = 35

G20 = OH
Patent location: claim 1
Note: and tautomers and pharmaceutically acceptable salts
Note: additional oxo or thio substitution also claimed
Note: substitution is restricted
Stereochemistry: and stereoisomers

L50 ANSWER 58 OF 58 MARPAT COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 135:348719 MARPAT Full-text
TITLE: Cosmetic compositions containing 2-furanone derivatives
INVENTOR(S): Schulze Zur Wiesche, Erik; Hollenberg, Detlef; Bossmann, Britta
PATENT ASSIGNEE(S): Henkel K.-G.a.A., Germany
SOURCE: Ger. Offen., 56 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10022077	A1	20011108	DE 2000-10022077	20000506
CA 2407962	A1	20011115	CA 2001-2407962	20010428
WO 2001085106	A2	20011115	WO 2001-EP4822	20010428
WO 2001085106	A3	20020801		
W: AU, BR, CA, CN, CZ, HU, JP, KR, MX, NZ, PL, RU, SI, SK, TR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1280496	A2	20030205	EP 2001-938136	20010428
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, CY, TR				
JP 2003532658	T	20031105	JP 2001-581761	20010428
RU 2324470	C2	20080520	RU 2002-133234	20010428
US 20030206933	A1	20031106	US 2002-289061	20021106
US 6858216	B2	20050222		
PRIORITY APPLN. INFO.:			DE 2000-10022077	20000506
			WO 2001-EP4822	20010428

AB The invention concerns cosmetic hair and skin prepns. that contain derivs. of tetrahydro-2-furanone and 2(5H)-furanone with the general formula (I) and (II); R1-R10 are defined. Thus a hair rinsing composition contained (weight/weight%): Eumulgin B2 0.3; cetyl/stearyl alc. 3.3; isopropylmyristate 0.5; liquid paraffin oil 0.3; Dehyquart A-CA 2.0; Salcare SC96 1.0; citric acid 0.4; Gluadin WQ 2.0; dihydro-3-hydroxy-4,4-dimethyl-2(3H)-furanone 0.5; Phenopip 0.8; water to 100. Compns. containing the 2-furanone derivs. can also be used for cleaning china, glass, metal, plastic, leather or wood.

MSTR 2

G1 = OH / CH2NH2 / NH2 / CO2H
Patent location: claim 1
Note: substitution is restricted

Search History

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L1              STRUCTURE UPLOADED
L2           23 SEA SSS SAM L1

     FILE 'HCAPLUS' ENTERED AT 12:00:10 ON 17 SEP 2009
L3            1 SEA SPE=ON  ABB=ON  PLU=ON  US2003-630170/APPS

     FILE 'REGISTRY' ENTERED AT 12:02:39 ON 17 SEP 2009
L4          142 SEA SPE=ON  ABB=ON  PLU=ON  (119-13-1/BI OR 148-03-8/BI OR
                59-02-9/BI OR 7616-22-0/BI OR 106-45-6/BI OR 16691-43-3/BI OR
                2349-67-9/BI OR 3004-42-0/BI OR 3282-30-2/BI OR 349445-19-8/BI
                OR 37052-78-1/BI OR 4556-23-4/BI OR 475293-89-1/BI OR 5331-91-9
                /BI OR 577952-47-7/BI OR 577952-48-8/BI OR 577952-49-9/BI OR
                577952-50-2/BI OR 577952-51-3/BI OR 577952-52-4/BI OR 577952-53
                -5/BI OR 577952-54-6/BI OR 577952-55-7/BI OR 577952-56-8/BI OR
                577952-57-9/BI OR 577952-58-0/BI OR 577952-60-4/BI OR 577952-61
                -5/BI OR 577952-62-6/BI OR 577952-63-7/BI OR 577952-64-8/BI OR
                577952-65-9/BI OR 577952-66-0/BI OR 577952-67-1/BI OR 577952-68
                -2/BI OR 577952-69-3/BI OR 577952-70-6/BI OR 577952-71-7/BI OR
                577952-72-8/BI OR 577952-73-9/BI OR 577952-74-0/BI OR 577952-75
                -1/BI OR 577952-76-2/BI OR 577952-77-3/BI OR 577952-78-4/BI OR
                577952-79-5/BI OR 577952-80-8/BI OR 577952-81-9/BI OR 577952-82
                -0/BI OR 577952-83-1/BI OR 577952-84-2/BI OR 577952-85-3/BI OR
                577952-86-4/BI OR 577952-87-5/BI OR 577952-88-6/BI OR 577952-89
                -7/BI OR 577952-90-0/BI OR 577952-91-1/BI OR 577952-92-2/BI OR
                577952-93-3/BI OR 577952-94-4/BI OR 577952-95-5/BI OR 577952-96
                -6/BI OR 577952-97-7/BI OR 577952-98-8/BI OR 577952-99-9/BI OR
                577953-00-5/BI OR 577953-01-6/BI OR 577953-02-7/BI OR 577953-03
                -8/BI OR 577953-04-9/BI OR 577953-05-0/BI OR 577953-06-1/BI OR
                577953-07-2/BI OR 577953-08-3/BI OR 577953-09-4/BI OR 577953-10
                -7/BI OR 577953-11-8/BI OR 577953-12-9/BI OR 577953-13-0/BI OR
                577953-14-1/BI OR 577953-15-2/BI OR 577953-16-3/BI OR 577953-17
                -4/BI OR 577953-18-5/BI OR 577953-19-6/BI OR 577953-20-9/BI OR
                577953-21-0/BI OR 577953-22-1/BI OR 577953-23-2/BI OR 577953-24
                -3/BI OR 577953-25-4/BI OR 577953-26-5/BI OR 577953-27-6/BI OR
                577953-28-7/BI OR 577953-29-8/BI OR 577953-30-1/BI OR 577953-31
                -2/BI OR 577953-32-3/BI OR 577953-33-4/BI OR 577953-34-5/
L5            0 SEA SPE=ON  ABB=ON  PLU=ON  L2 AND L4
L6         8276 SEA SSS FUL L1
L7          117 SEA SPE=ON  ABB=ON  PLU=ON  L6 AND L4
L8              STRUCTURE UPLOADED
L9           50 SEA SUB=L6 SSS SAM L8
L10        1239 SEA SUB=L6 SSS FUL L8

     FILE 'HCAPLUS' ENTERED AT 12:11:22 ON 17 SEP 2009
L11         821 SEA SPE=ON  ABB=ON  PLU=ON  L10
L12        6489 SEA SPE=ON  ABB=ON  PLU=ON  ACNE/CT OR SKIN, DISEASE+OLD,NT/CT
                (L) ROSACEA/OBI
L13       20206 SEA SPE=ON  ABB=ON  PLU=ON  DERMATITIS+NT/CT
L14           6 SEA SPE=ON  ABB=ON  PLU=ON  L11 AND (L12 OR L13)
L15       69130 SEA SPE=ON  ABB=ON  PLU=ON  UV RADIATION+OLD,NT/CT
L16           5 SEA SPE=ON  ABB=ON  PLU=ON  L11 AND L15
L17       10603 SEA SPE=ON  ABB=ON  PLU=ON  (UV LIGHT/OBI)
L18       32750 SEA SPE=ON  ABB=ON  PLU=ON  (ULTRAVIOLET/OBI OR ULTRA VIOLET/OB
                I)(2A)(LIGHT/OBI)
L19           2 SEA SPE=ON  ABB=ON  PLU=ON  L11 AND (L17 OR L18)
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     FILE 'HCAPLUS' ENTERED AT 12:55:17 ON 17 SEP 2009
L20           32 SEA SPE=ON  ABB=ON  PLU=ON  BODDUPALLI S?/AU
L21           11 SEA SPE=ON  ABB=ON  PLU=ON  WALKINSHAW G?/AU
L22        19787 SEA SPE=ON  ABB=ON  PLU=ON  WANG B?/AU
L23        19821 SEA SPE=ON  ABB=ON  PLU=ON  (L20 OR L21 OR L22)
L24            1 SEA SPE=ON  ABB=ON  PLU=ON  L23 AND (L14 OR L16 OR L19)
L25           12 SEA SPE=ON  ABB=ON  PLU=ON  (L14 OR L16 OR L19)
L26          821 SEA SPE=ON  ABB=ON  PLU=ON  L10

     FILE 'WPIX' ENTERED AT 12:58:30 ON 17 SEP 2009
L27            2 SEA SSS SAM L8
L28           46 SEA SSS FUL L8
L29           28 SEA SPE=ON  ABB=ON  PLU=ON  L28/DCR
L30           21 SEA SPE=ON  ABB=ON  PLU=ON  L29 AND (PRY<=2002 OR AY<=2002 OR
                 PY<=2002 OR PD<=2002)
L31            1 SEA SPE=ON  ABB=ON  PLU=ON  (L20 OR L21 OR L22) AND L30

     FILE 'BEILSTEIN' ENTERED AT 13:01:54 ON 17 SEP 2009
L32          229 SEA SPE=ON  ABB=ON  PLU=ON  L10

     FILE 'REGISTRY' ENTERED AT 13:03:13 ON 17 SEP 2009
L33            0 SEA SPE=ON  ABB=ON  PLU=ON  L4 AND P/ELS
L34              STRUCTURE UPLOADED
L35            3 SEA SUB=L6 SSS SAM L34
L36          105 SEA SUB=L6 SSS FUL L34

     FILE 'HCAPLUS' ENTERED AT 13:07:41 ON 17 SEP 2009

     FILE 'REGISTRY' ENTERED AT 13:07:46 ON 17 SEP 2009
L37          102 SEA SPE=ON  ABB=ON  PLU=ON  L36 AND L4

     FILE 'HCAPLUS' ENTERED AT 13:08:06 ON 17 SEP 2009
L38            2 SEA SPE=ON  ABB=ON  PLU=ON  L36

     FILE 'BEILSTEIN' ENTERED AT 13:08:24 ON 17 SEP 2009
L39            0 SEA SUB=L32 SSS SAM L34
L40            0 SEA SUB=L32 SSS FUL L34

     FILE 'MARPAT' ENTERED AT 13:08:50 ON 17 SEP 2009
L41           16 SEA SSS SAM L8
L42          314 SEA SSS FUL L8
L43            2 SEA SUB=L42 SSS SAM L34
L44           27 SEA SUB=L42 SSS FUL L34

     FILE 'HCAPLUS, WPIX' ENTERED AT 14:07:08 ON 17 SEP 2009
L45            2 DUP REM L24 L31 (0 DUPLICATES REMOVED)

     FILE 'HCAPLUS' ENTERED AT 14:07:56 ON 17 SEP 2009
L46           11 SEA SPE=ON  ABB=ON  PLU=ON  L25 NOT L24
L47            1 SEA SPE=ON  ABB=ON  PLU=ON  L38 NOT L24
L48           12 SEA SPE=ON  ABB=ON  PLU=ON  (L46 OR L47)

     FILE 'WPIX' ENTERED AT 14:08:44 ON 17 SEP 2009
L49           20 SEA SPE=ON  ABB=ON  PLU=ON  L30 NOT L31

     FILE 'HCAPLUS, WPIX, MARPAT' ENTERED AT 14:09:24 ON 17 SEP 2009
L50           58 DUP REM L48 L49 L44 (1 DUPLICATE REMOVED)
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